

Faculty of Science

See also General Course and Examination Regulations.

Note: In certain course regulations the Degree of Bachelor of Science is referred to as "the ordinary Degree of Bachelor of Science" to distinguish it from the Degree of Bachelor of Science with Honours.

1. Enrolment in the Degree of Bachelor of Science

Every candidate for the Degree of Bachelor of Science shall follow a course of study as laid down in these Regulations consisting of not fewer than 360 points (3 EFTS).

2. Qualification for the Degree of Bachelor of Science

To qualify for the Degree of Bachelor of Science

- a candidate must pass courses having a minimum total value of 360 points.
- at least 255 points of the 360 must be from the Schedule to the Regulations for the Bachelor of Science.
- The remaining 105 points of the 360 may be for courses from any degree of the University. They will be subject to the Regulations of the other degree.
- at least 225 points must be for courses above 100-level.
- at least 90 points must be for courses at 300-level.
- at least 60 points of that 90 must be in a single subject from the Schedule to the Regulations for the Bachelor of Science or from a list of specified courses approved for the major requirement.

3. Enrolment in the Degree of Bachelor of Science with Honours

*Subject to UNZ CUAP approval due December 2014.

- at least Majors *9 56.g1BuTn Statistics.
- In addition to meeting the requirements of a subject major, the degree of Bachelor of Science

may be endorsed in the following subject/s:

- Biosecurity
- Biotechnology
- Ecology
- Environment and Science
- Resilience and Sustainability.

Note: The course and programme requirements are given in the Schedule of Endorsements for the Award elsewhere in the degree regulations.

4. Enrolment in the Degree of Bachelor of Science with Honours

Candidates who wish to enrol for a course of study whose total points exceed 150 points for a full year or 75 points for a single semester must first obtain the approval of the Dean of Science.

Note: Students should seek advice from the College Office as to the recommended GPA for such a course of study.

5. Enrolment in the Degree of Bachelor of Science with Honours

Subject to the approval of the Dean of Science, a student who has achieved a sufficient standard in a subject or subjects in the National Certificate in Educational Achievement (NCEA) or other comparable examination may be enrolled in one or more courses listed in the Schedule with Prescription numbers from 201 to 299 without having passed the appropriate prerequisite to that course provided that:

- if the candidate is credited with the course or she shall not thereafter be credited with any prerequisite in the subject of which that course forms a part, and
- if the candidate fails the course but in the opinion of the examiners attains the standard of a pass in a course at 100 or 200-level or she shall be credited with a pass in such course or courses as the Dean of Science may decide.

6. Discontinuation of the Degree of Bachelor of Science

A candidate who discontinues with a BE or BE(Hons) degree and encaDj-0.01 a course at 1 de

7. Concurrent enrolment in the Degree of Bachelor of Science and Bachelor of Engineering (Honours)

A candidate who takes concurrently the course for the Degree of Bachelor of Science and Bachelor of Engineering (Honours) shall, in order to qualify for the award of both degrees, be enrolled for a course of study approved under the provisions of General Course and Examination Regulation A3, and shall:

- (a) pass all the subjects laid down in the current Regulations for the Degree of Bachelor of Engineering (Honours);
- (b) obtain 180 points above 100-lev by passing courses selected from the Schedule to the Regulations for the Bachelor of Science which have not been credited to the Degree of Bachelor of Engineering (Honours), or used to obtain exemption from a course in that degree. Of these points, 90 must be from 300-lev courses and include at least 60 points from a single subject or as required by the subject major;
- (c) if admitted into the Bachelor of Engineering (Honours) under BE(Hons) Regulation 4 Prior Learning to the First Professional Year, complete the 180 points in (b) above. A student may be required to complete 100-lev or prerequisite courses from the Science Schedule if their New Zealand Entrance qualification was not in appropriate subjects;
- (d) have met the requirements of a BE(Hons) to be eligible to graduate to BSc under this cross credit regulation.

8. Concurrent enrolment in the Degree of Bachelor of Engineering (Honours) and the Degree of Bachelor of Science

A candidate who has qualified for the Degree of Bachelor of Engineering (Honours) and who is proceeding to the Degree of Bachelor of Science shall be enrolled for an approved course of study and shall satisfy the requirements of Regulation 7 hereof.

9. Concurrent enrolment in the Degree of Bachelor of Science and the Degree of Bachelor of Engineering (Honours)

Candidates for the Degree of Bachelor of Science under Regulations 6, 7 or 8 shall require permission of the Head of the Department of Mathematics and Statistics for enrolment in any Mathematics or Statistics course.

Note: Some Mathematics and Statistics courses duplicate significantly material in Engineering Mathematics, and will be restricted. Other courses may have prerequisites partially or fully satisfied by credits in Engineering Mathematics.

10. Concurrent enrolment in the Degree of Bachelor of Science and the Degree of Bachelor of Forestry Science

- (a) A candidate for the Degree of Bachelor of Science who is or has been enrolled for the Degree of Bachelor of Forestry Science shall, in order to qualify for the award of both degrees, meet all requirements as laid down in the Regulations of the Degree of Bachelor of Forestry Science and obtain 180 points above 100-lev in courses selected from the Schedule to the Regulations for the Degree of Bachelor of Science which have not been credited to the Degree of Bachelor of Forestry Science or used to obtain exemption from a course in that degree. Of these points, 90 points must be from 300-lev courses and include at least 60 points from a single subject or as required by the subject major.
- (b) With the approval of the Dean of Engineering and Forestry a candidate may substitute an additional 200-lev course equivalent to 15 points or a 300-lev course equivalent to 15 points from the Bachelor of Science Schedule for any FORE 400 elective.
- (c) A candidate shall have met the requirements of a BForSc to be eligible to graduate to BSc under this cross credit regulation.

11. Credit towards the Degree of Bachelor of Science

- (a) The Academic Board may grant credit towards the degree from any other tertiary qualification where the content and standard of such study are considered appropriate to the degree. Credit may be specified or unspecified, and will be at an appropriate level. Credit from a completed degree will not exceed a maximum of 120 points. Credit from an incomplete degree, diploma or other tertiary qualification will not exceed 240 points.
- (b) National qualifications registered on the New Zealand Qualifications Framework which could properly be taught at university degree level may be considered for credit on the following basis: National Diploma of Science at Levels 5 and 6, or equivalent science qualification, and courses for incomplete qualifications: points will be assigned on the basis of the courses credited gained at Levels 5, 6 and 7. Completed qualifications at Level 7 will be credited as a maximum of 120 points.

Note: The maximum of 120 points must be consistent with credit under Regulation K: Cross Crediting and Double Degrees.

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BIOL 305	Practical Field Botany	15	SU1	P: BIOL 215 or BIOL 270 or BIOL 273 or subject to approval by the Head of the School of Biological Sciences
BIOL 306	Special Topic	15		P: Entry subject to approval by the Head of School.
BIOL 307	Special Topic	15	A S2	P: Entry subject to approval by the Head of School.
BIOL 308	Special Topic	30	A S2	P: Entry subject to approval by the Head of School.
BIOL 309	Experimental Design and Data Analysis for Biologists	15	S2	P: BIOL 209 or other statistical background as determined by the Head of School.
BIOL 313	Advanced Molecular and Industrial Microbiology	15	S2	P: BIOL 213 and BIOL 231 or BCHM 202. For students enrolled before 2010, BIOL 213. RP: BIOL 253
BIOL 331	Biochemistry 3	30		P: (1) BCHM 201, or BCHM 221 and BCHM 222; (2) BCHM 202 or BIOL 230 or BIOL 231 R: PAMS 308, BCHM 301 EQ: BCHM 301
BIOL 332	Genetics and Evolution of Invasive Species	15	S2	P: BIOL 271
BIOL 333	Molecular Genetics	15	S1	P: BIOL 231/BCHM 202 and BIOL 213 R: BIOL 330
BIOL 334	Evolutionary Genetics	15	S2	P: BIOL 271 R: BIOL 330
BIOL 335	Bioinformatics and Genomics	15	S1	P: 30 points from: BIOL 209, BIOL 231, BIOL 253, BCHM 253, BIOL 271, BCHM 221, BCHM 222, BCHM 202, BIOL 213, COSC 261, COSC 262, COSC 265, 200 level MATH, 200 level STAT. Students with no Biology/Biochemistry papers require permission from the Head of School. R: BIOL 330 RP: BIOL 333 or BIOL 334
BIOL 351	Cell Biology 2	15	S2	P: BIOL 253. Students enrolled before 2010, either (1) BIOL 231 and 232; or (2) BIOL 230 or BIOL 250 or BIOL 252 or BCHM 201.
BIOL 352	Plant Development and Biotechnology	15	S1	P: BIOL 254 or BIOL 253 or BIOL 231/BCHM 202
BIOL 354	Animal Ecophysiology	15	S2	P: BIOL 250
BIOL 355	Neurons, Hormones and Behaviour	15	S1	P: BIOL 250 RP: BIOL 272
BIOL 371	Evolutionary Ecology	15	S1	P: BIOL 271
BIOL 373	Behavioural Ecology	30	S1	P: (1) Either BIOL 271 or BIOL 272; (2) BIOL 209 or equivalent preparation in statistics.
BIOL 374	Marine Ecosystems	30	S2	P: BIOL 270 and BIOL 209 RP: BIOL 212
BIOL 375	Freshwater Ecosystems	15	S2	P: BIOL 270 and BIOL 209
BIOL 377	Global Change and Biosecurity	15	S1	P: (1) BIOL 270 or FORE 202; (2) BIOL 209 or FORE 222/FORE 224
BIOL 378	Population Ecology and Conservation	15	S1	P: (1) BIOL 270 or FORE 202; (2) BIOL 209 or FORE 222/FORE 224

Biosecurity

2015 / / / /				
BIOS 201	Issues in New Zealand Biosecurity	15	SU2	P: 60 points at 100-level R: BIOS 101



Communication Disorders

		2015		/// /
CMDS 113	Introduction to Communication Disorders	15	S2	R: CMDS 111 and CMDS 112
CMDS 161	Anatomy and Physiology of the Speech and Hearing Mechanism	15	SU2 S1	
CMDS 162	Neuroscience of Swallowing and Communication	15	S2	R: CMDS 667
CMDS 231	Clinical Phonetics	15	S1	R: CMDS 661
CMDS 242	Introduction to Audiology	15	NO	R: CMDS 663
CMDS 243	Introduction to Audiologic Assessment and Management	15	S1	R: CMDS 663
CMDS 262	Neurosciences	15	NO	R: CMDS 667

Computer Science

		2015		/// /
COSC 110	Working in a Digital World	15	S1	
COSC 121	Introduction to Computer Programming	15	S1 S2	
COSC 122	Introduction to Computer Science	15	SU2 S2	RP: COSC 121
COSC 241	Special Topic	15	NO	P: Entry subject to approval by the Head of Department.
COSC 242	Special Topic	15	NO	P: Entry subject to approval by the Head of Department.
COSC 243	Special Topic	15	NO	P: Entry subject to approval by the Head of Department.
COSC 261	Formal Languages and Compilers	15	S1	P: COSC 121 and COSC 122 and MATH 120 R: COSC 202, COSC 222
COSC 262	Algorithms	15	S1	P: (1) COSC 121; (2) COSC 122; R: COSC 202, COSC 229, COSC 329 RP: MATH 120
COSC 264	Introduction to Computer Networks and the Internet	15	S2	P: (1) COSC 121; (2) COSC 122; (3) STAT 101 or EMTH 119 R: COSC 227, COSC 231
COSC 265	Relational Database Systems	15	S2	P: COSC 121 or INFO 125 R: COSC 205, COSC 226
COSC 362	Data and Network Security	15	S2	P: COSC 264 or INFO 333. R: COSC 332, ACIS 323, AFIS 323 RP: It is recommended that COSC 362 and COSC 364 be taken together.
COSC 363	Computer Graphics	15	S1	P: (1) ENCE 260, (2) 30 points of 200-level Computer Science, (3) 30 points of EMTH or 15 points of MATH/STAT (MATH 120 recommended). MATH 101 is not acceptable. RP: COSC 261
COSC 364	Internet Technology and Engineering	15	S1	P: (1) COSC 264; (2) COSC 261; (3) 30 points of EMTH or 15 points of MATH/STAT (STAT 101 recommended). MATH 101 is not acceptable. R: COSC 331, COSC 327 RP: It is recommended that COSC 362 and COSC 364 be taken together.

COSC 366	Research Project	15	SU2	



ECON 207	Intermediate Microeconomics - Households and Government	15	S2	P: ECON 104 R: ECON 202, ECON 203
ECON 208	Intermediate Microeconomics - Firms and Markets	15	S1	P: ECON 104 R: ECON 202, ECON 203
ECON 213	Introduction to Econometrics	15	S1	P: (1) ECON 104 or ECON 105; and (2) 15 points from STAT or MSCI 110. RP: MATH 101 or Year 13 Mathematics with Calculus.
ECON 222	International Trade	15	S1	P: ECON 104 R: ECON 209
ECON 223	Introduction to Game Theory for Business, Science and Politics	15	S2	P: Any 105 points
ECON 225	Environmental Economics	15	NO	P: ECON 104
ECON 310	Economic Thinking for Business	15	S2	P: 1) ECON 207 and ECON 208 or 2) ECON 203
ECON 321	Microeconomic Analysis	15	S1	P: (1) (ECON 207 and ECON 208) or ECON 203; and (2) MATH 102 or MATH 199; and (3) 15 points from STAT



ECON 344	International Finance	15	S2	P: ECON 201 or ECON 206 or FINC 203 R: ECON 210 and FINC 315 and FINC 344 RP: 15 points in MATH or Year 13 Mathematics with Calculus EQ: FINC 344
ECON 345	The Economics of Risk and Insurance	15	S2	P: (1) ECON 203; or (2) ECON 202 and FINC 205; or (3) ECON 208 and (MATH 102 or MATH 199) EQ: FINC 345
ECON 350	Special Topic: The Economics of Climate Change	15	SU2	P: ECON 208 or ECON 203
ECON 390	Economics Internship	15	A	P: (1) ECON 203 or ECON 208 (2) Subject to Head of Department Approval R: FINC 390, ARTS 395

Engineering

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MATH 270	Mathematical Modelling and Computation 2	15	S2	P: (MATH 170 or MATH 171 or EMTH 171 or MATH 280 or MATH 282 or COSC 121 or Head of School approval) and (EMTH 119 or MATH 103 or MATH 109 or MATH 199) R: EMTH 271, MATH 271
MATH 302	Partial Differential Equations	15	S2	P: (MATH 270 or MATH 271 or EMTH 271) and (MATH 170 or MATH 171 or EMTH 171 or MATH 280 or MATH 282 or COSC 121 or Head of School approval) and (EMTH 119 or MATH 103 or MATH 109 or MATH 199) R: EMTH 302, MATH 271



GEOG 305	Environmental Hazards and Management	30	S1	P: 30 points of 200-level Geography, or in special cases with approval of the Head of Department.
GEOG 309	Research Methods in Geography	30	S2	P: 30 points of 200-level Geography, or in special cases with approval of the Head of Department. R: GEOG 204, GEOG 303
GEOG 310	Weather Systems	15	S2	P: 30 points of 200-level Geography, including GEOG 201, or in special cases with approval of the Head of Department.
GEOG 311	Coastal Studies	15	S1	P: 30 points of 200-level Geography, including GEOG 201, or in special cases with approval of the Head of Department.
GEOG 312	Glacial Processes	15	S2	P: 30 points of 200-level Geography, including GEOG 201, or in special cases with approval of the Head of Department.
GEOG 313	Remote Sensing Data for Geographic Analysis	15	S2	P: 30 points of 200-level Geography, including GEOG 205, or in special cases with approval of the Head of Department.
GEOG 320	Space, Place and Power	30	NO	P: 30 points of 200-level Geography, including GEOG 202 or GEOG 212, or entry with the approval of the Head of Department. R: CULT 320 EQ: CULT 320
GEOG 321	European Integration From Community to Union	30	S2	P: One of: (a) 15 points with a B average in any Arts subject; or (b) any 15 points in GEOG at 200-level; or (c) 15 points of EURO at 200-level with a B Pass; or (d) 30 points of EURO at 200-level; or (e) any 45 points from the Arts Schedule at 200-level. R: EURO 210, EURO 310, EURA 210, EURA 310 EQ: EURO 310, EURA 310
GEOG 322	Geography of Health	30	S1	P: 30 points of 200-level Geography, or HLTH 201 and HLTH 202, or in special cases with approval of the Head of Department.
GEOG 323	Geospatial Analysis in the Social and Environmental Sciences	15	S2	P: 30 points of 200-level Geography, including GEOG 205, or in special cases with approval of the Head of Department.
GEOG 324	Advanced GIS	15	S1	P: 30 points of 200-level Geography, including GEOG 205, or in special cases with approval of the Head of Department.
GEOG 340	Field Based Geomorphic Applications	15	NO	P: 30 points of 200-level Geography, including GEOG 201, or in special cases with approval of the Head of Department.
GEOG 343	Independent Course of Study	15	NO	P: Subject to approval of the Head of Department.
GEOG 350	Research Methods in Physical Geography	30	S1 S2	P: A major in Geological Sciences and enrolment in the Frontiers Abroad programme R: GEOG 211

Geology

		2015		/// /
GEOL 111	Planet Earth: An Introduction to Geology	15	SU1 S1	R: ENCI 271
GEOL 112	Understanding Earth History	15	S2	R: ENCI 271 RP: GEOL 111
GEOL 113	Environmental Geohazards	15	S2	

GEOLOGY 237	Special Topic	15	S1 S2	P: Entry subject to Head of Department approval.
GEOLOGY 240	Field Studies A - Mapping	15	S1	P: GEOLOGY 111 and GEOLOGY 112, or, with a B+ average or a standard acceptable to the Head of Department, GEOLOGY 113 may be substituted for GEOLOGY 111 or GEOLOGY 112. C: 15 points from any of GEOLOGY 242-245 offered in the same semester R: GEOLOGY 230
GEOLOGY 241	Field Studies B - Field Techniques	15	S2	P: GEOLOGY 111 and GEOLOGY 112, or, with a B+ average or a standard acceptable to the Head of Department, GEOLOGY 113 may be substituted for GEOLOGY 111 or GEOLOGY 112. C: 15 points from any of GEOLOGY 242-245 offered in the same semester R: GEOLOGY 231
GEOLOGY 242	Rocks, Minerals and Ores	15	S1	P: GEOLOGY 111 and GEOLOGY 112, with a B+ average or a standard acceptable to the Head of Department, GEOLOGY 113 may be substituted for GEOLOGY 112. R: GEOLOGY 232, GEOLOGY 238
GEOLOGY 243	Depositional Environments and Stratigraphy	15	S1	P: GEOLOGY 111 and GEOLOGY 112, with a B+ average or a standard acceptable to the Head of Department, GEOLOGY 113 may be substituted for either GEOLOGY 111 or GEOLOGY 112. R: GEOLOGY 234, GEOLOGY 235
GEOLOGY 244	S1 P: GEOLOGY 111 and GEOLOGY 112, or, with a B+ average or a standard acceptable to the Head of Department, GEOLOGY 113 may be substituted for GEOLOGY 111 or GEOLOGY 112. C: 15 points from any of GEOLOGY 242-245 offered in the same semester			

MSCI 371	Logistics and Supply Chain Management	15	S1	P: (1) MSCI 270 or MGMT 270 or MSCI 220; and (2) MSCI 271 or MGMT 271 or MSCI 221 R: MSCI 321, MGMT 371 EQ: MGMT 371
MSCI 372	Project Management	15	S2	P: (1) i) MSCI 270 or MGMT 270 or MSCI 220; and ii) MSCI 271 or MGMT 271 or MSCI 221; and iii) A further 15 points from Commerce or (2) 90 points at 200-level or above in Commerce, Science or Engineering R: MSCI 322, MSCI 324, MGMT 372, AFIS 313, ACIS 313, INFO 313 EQ: MGMT 372
MSCI 373	Quality Management	15	S2	P: (1) MSCI 270 or MGMT 270 or MSCI 220; and (2) MSCI 271 or MGMT 271 or MSCI 221 R: MSCI 323, MGMT 373 EQ: MGMT 373

Mathematics

2015 / / / /				
MATH 101	Methods of Mathematics	15	SU2 S1	R: MATH 199
MATH 102	Mathematics 1A	15	S1 S2	R: MATH 108, MATH 199, EMTH 118
MATH 103	Mathematics 1B	15	SU2 S1 S2	P: MATH 102 or MATH 108 or EMTH 118 R: MATH 109, MATH 199, EMTH 119
MATH 120	Discrete			R: MATH 199

MATH 394	Independent Course of Study	15	S2	P: Subject to the approval of the Head of School.
MATH 395	Mathematics Project	15	SU2	P: 45 points from MATH 210-294, and approval of Head of School R: MATH 305

Philosophy

		2015		1 1 1 1
PHIL 110	Science Good, Bad, and Bogus	15	S2	R: HAPS 110 EQ: HAPS 110
PHIL 132	God, Mind, and Freedom	15	S1	R: PHIL 101
PHIL 133	Philosophy and Human Nature	15	S2	
PHIL 137	Computers, Artificial Intelligence and the Information Society	15	S1	
PHIL 138	Logic and Critical Thinking	15	NO	R: PHIL 132 (prior to 2006), MATH 130, PHIL 134/MATH 134
PHIL 139	Ethics, Politics and Justice	15	S1	
PHIL 203	Dinosaurs, Quarks and Quasars: The Philosophy of Science	15	S2	P: 15 points of Philosophy or 30 points of science courses R: PHIL 223
PHIL 208	The Brain Gym: An Introduction to Logic	15	S1	P: Any 15 points in Philosophy or Mathematics or Computer Science or Engineering or Linguistics; or with the approval of the Department Coordinator 15 points in any subject. R: PHIL 225, PHIL 246, PHIL 346, PHIL 308, MATH 208, MATH 308
PHIL 209	Logic B	15	NO	P: Any 15 points in Philosophy or Mathematics or Computer Science or Linguistics R: PHIL 225, PHIL 247, PHIL 347, PHIL 309, MATH 209, MATH 309 EQ: MATH 209
PHIL 212	Reason, Desire and Happiness: Hellenistic Philosophy	15	S2	P: 15 points in PHIL or CLAS or a Bachelor in 60 points of appropriate courses with approval of the Program Coordinator. R: PHIL 312
PHIL 220	Darwin's Dangerous Idea	15	SU1	P: 15 points in PHIL or 30 points in any schedule
PHIL 224	Greek Philosophy	15	NO	P: 15 points in PHIL, or Bachelor in 60 points of appropriate courses with approval of the Program Coordinator. R: CLAS 224, CLAS 324, PHIL 314 EQ: CLAS 224
PHIL 229	Philosophy of Religion: Rationality, Science and the God Hypothesis	15	S1	P: At least 15 points in Philosophy. Students without this prerequisite but with at least 60 points in appropriate subjects may be admitted with the approval of the Department Coordinator. R: RELS 210, PHIL 318
PHIL 233	Epistemology and Metaphysics	15	S1	P: 15 points in PHIL; or Bachelor in 60 points of appropriate courses with approval of the Department Coordinator.
PHIL 235	Cyberspace, Cyborgs, and the Meaning of Life	15	S2	P: Any 15 points in Philosophy or Mathematics or Computer Science or Bachelor in 60 points of appropriate courses with approval of the Program Coordinator.
PHIL 236	Ethics	15	S1	P: 15 points in PHIL or Bachelor in 60 points of appropriate courses with approval of the Program Coordinator. R: PHIL 321

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PHYS 208	Special Topic	15	S1	P: Admission only by permission of the Head of Department
PHYS 209	Special Topic	15	S2	P: Admission only by permission of the Head of Department
PHYS 285	Technical and Professional Skills for Physicists	15	S1	P: (1) PHYS 102; (2) MATH 102 or EMTH 118 (3) MATH 170 or EMTH 171 or COSC 121 or MATH 280 or MATH 282 or another approved course in coding programming. These prerequisites may be replaced by a high level of achievement in level 3 NCEA Physics and Mathematics with Calculus or other background approved by the Head of Department. R: PHYS 281, PHYS 282 RP: MATH 103 or EMTH 119.
PHYS 310	Thermal, Statistical and Particle Physics	15	S1	P: PHYS 203 and MATH 201 R: PHYS 204, PHYS 440
PHYS 311	Quantum Mechanics	15	S1	P: (1) PHYS 203; and (2) MATH 103 or MATH 109 or EMTH 119 or MATH 201. RP: MATH 202 and MATH 203
PHYS 313	Advanced Electromagnetism and Materials	15	S2	P: (1) PHYS 203; (2) PHYS 206; (3) MATH 103 or MATH 109 or EMTH 119 or MATH 201. R: PHYS 312, PHYS 314, PHYS 443 RP: PHYS 205, MATH 201
PHYS 319	Atmospheric, Oceanic and Climate Dynamics	15	S2	P: (1) PHYS 201 or PHYS 202 or PHYS 203; (2) MATH 103 or MATH 109 or EMTH 119 or MATH 201. R: PHYS 316, PHYS 418, PHYS 419 RP: MATH 202
PHYS 323	Laser Physics and Modern Optics	15	NO	P: 1) PHYS 203; (2) PHYS 206; (3) MATH 103 or MATH 109 or EMTH 119 or MATH 201. R: PHYS 413 RP: PHYS 205, MATH 201
PHYS 326	Classical Mechanics and Symmetry Principles	15	S1	P: (1) PHYS 202 and PHYS 203; and (2) MATH 201 RP: MATH 202 and MATH 203
PHYS 327	Special Topic	15	S1	P: (1) Subject to approval of the Head of Department.; (2) MATH 103 or MATH 109 or equivalent.
PHYS 328	Special Topic	15	S2	P: (1) Subject to approval of the Head of Department.; (2) MATH 103 or MATH 109 or equivalent.
PHYS 329	Special Topic	15	S1	P: (1) Subject to approval of the Head of Department.; (2) MATH 103 or MATH 109 or equivalent.
PHYS 381	Advanced Experimental Physics and Astronomy	15	S2	P: (1) Either (PHYS 282 and 22 points from PHYS 221-224) or (PHYS 285 and 30 points from PHYS 201-204 including either PHYS 202 or PHYS 204). (2) MATH 103 or MATH 109 or EMTH 119. R: ASTR 381 RP: MATH 201 EQ: ASTR 381
PHYS 391	Introductory Physics Research	15	SU2 S1 S2	P: (1) MATH 103 or MATH 109 or equivalent (2) 44 points from PHYS 200 (3) Entry subject to a supervisor approved by the Head of Department, being available
ENEL 270	Principles of Electronics and Devices	15	S1	P: PHYS 102, MATH 103 or EMTH 119; or approval by the Head of Department R: ASTR 381
ENEL 290	Devices and Materials in Electrical Engineering	15	S2	P: PHYS 102, MATH 103 or EMTH 119; or approval by the Head of Department

Psychology

		2015		/ / / /	
PSYC 105	Introductory Psychology - Brain, Behaviour and Cognition	15	S1	R: PSYC 103, PSYC 104	
PSYC 106	Introductory Psychology - Social, Personality and Developmental	15	S2	R: PSYC 103, PSYC 104	
PSYC 206	Research Design and Statistics	15	S1	P: At least 15 points in 100-level of Psychology and at least 45 points overall	
PSYC 207	Developmental Psychology	15	S1	P: PSYC 104, or PSYC 105 and PSYC 106	
PSYC 208	Cognition	15	S1	P: PSYC 104, or PSYC 105 and PSYC 106, or with the approval of the Head of Department, a pass in a professional year of Engineering, or in approved courses in Computer Science, Linguistics, or Philosophy	
PSYC 209	Sensation and Perception	15	S2	P: PSYC 104, or PSYC 105 and PSYC 106, or with the approval of the Head of Department, a pass in a professional year of Engineering, or in approved courses in Art, Art History, or Computer Science	
PSYC 211	Personality	15	S2	P: PSYC 104, or PSYC 105 and PSYC 106	
PSYC 212	Foundations of Behavioural Neuroscience	15	S2	P: PSYC 105 and PSYC 106 RP: BIOL 111, and/or BIOL 113, and/or BIOL 116	
PSYC 332	Social Psychology	30	S2	P: PSYC 206. RP: 15 further points from PSYC 200.	
PSYC 333	Biological Psychology	30	S1	P: PSYC 206. RP: 15 further points from PSYC 200/300.	
PSYC 334	Learning and Behaviour Analysis	30		P: PSYC 206	
PSYC 335	Abnormal Psychology	30		P: PSYC 206. RP: PSYC 207, PSYC 211	
PSYC 336	Industrial and Organisational Psychology	15	S2	P: PSYC 206. RP: PSYC 211, 15 further points from PSYC 200	
PSYC 338	Family Psychology	30	NO	P: EITHER PSYC 206 or PSYC 207; OR PSYC 105 and PSYC 106 PLUS at least 15 points at 200-level or above in a course approved by the Head of Department Psychology	
PSYC 339	Health Psychology and Behaviour Change	30	S1	P: PSYC 206	
PSYC 340	Cognitive Psychology	15	NO	P: PSYC 208	
PSYC 341	Environmental Psychology	15	S1	P: PSYC 206, OR 30 points of 100-level of Psychology PLUS 15 points of relevant advanced courses approved by the Head of Department. RP: Any of BIOL 112, GEOG 106, GEOG 107, GEOG 108	
PSYC 342	Special Topic	30		P: PSYC 206	
PSYC 343	Psychology of Adult Development	30	NO	P: EITHER PSYC 206 or PSYC 207; OR PSYC 105 and PSYC 106 PLUS at least 15 points at 200-level or above in a course approved by the Head of Department Psychology	

STAT 312	Sampling Methods	15	S1	P: 15 points from STAT 201, STAT 202, STAT 213, and, a further 15 points from STAT 200 to STAT 299.
STAT 313	Computational Statistics	15	S1	P: STAT 211, STAT 213, STAT 221, EMTH 210, EMTH 271 or at least 15 points from STAT 200 to STAT 299.



- BIOL 332 Genetics and Evolution of Invasive Species (15 points)
 BIOL 377 Global Change and Biosecurity (15 points)
 BIOL 352 Plant Development and Biotechnology (15 points)

300- level courses: 45

Students will normally follow one of two pathways: a molecular/genetics pathway or an ecological/applied pathway. Recommended courses should be selected from:

Molecular/genetics pathway

100-

- LA S 101 The Legal System: Legal Method and Institutions
-

200-

- BIOL 203 Introduction to Forensic Biology
 BIOL 213 Microbiology and Genetics
 BIOL 254 Principles of Plant Physiology
 CHEM 224 Analytical and Environmental Chemistry
 ANTA 201 Antarctica and Global Change
 POLS 206 Public Policy: An Introduction
-

300-

- BIOL 309 Experimental Design and Data Analysis for Biologists
-

- BIOL 313 Advanced Molecular and Industrial

and a minimum of 30 points from the following:

- BIOL 330 Advanced Concepts in Genetics
- BIOL 332 Genetics and Evolution of Invasive Species
- BIOL 335 Bioinformatics and Genomics
- BIOL 351 Cell Biology
- BIOL 371 Evolutionary Ecology

300- :75

100-

- MATH 101 Introductory Mathematics with Applications or
- MATH 102 Mathematics
- LA 101 The Legal System
- SCIM 101 Science, Maori and Indigenous Knowledge
- ENGR 101 Foundations of Engineering

200-

- BIOS 201 Issues in New Zealand Biosecurity
- BIOL 215 Plant Diversity and Systematics
- BIOL 250 Principles of Animal Physiology
- BIOL 273 New Zealand Biodiversity and Biosecurity
- POLS 206 Public Policy: An Introduction
- BCHM 221 Biochemistry A
- BCHM 222 Biochemistry B
- BCHM 281 Practical Biochemistry
- PHIL 249 Environmental Ethics

300-

- BCHM 303 Special Topic: Toxicology
- BIOL 331/BCHM301 Biochemistry 3
- SCIE 301/302 Science and Entrepreneurship

Students will normally follow one of two pathways: an environmental pathway or a plant pathway.

Recommended combinations of courses are:

Environmental Biotechnology

100-

- BIOL 111 Cellular Biology and Biochemistry
- BIOL 112 Ecology, Evolution and Conservation
- BIOL 113 Diversity of Life
- CHEM 112 Structure and Reactivity
- STAT 101 Statistics 1s

Plus recommended courses from list above

200-

- BIOL 209 Introduction to Biological Data Analysis
 - BIOL 253 Cell Biology 1
 - BIOL 254 Plant Developmental Biology
 - BIOL 213 Microbiology and Genetics
 - BIOL 231 Foundations in Molecular Biology
 - BIOL 271 Evolution
 - BIOL 215 Plant Diversity and Systematics
 - BIOL 273 NZ Biodiversity and Biosecurity
 - BCHM 281 Practical Biochemistry
- Plus recommended courses from lists above

300-

- BIOL 313 Advanced Molecular and Industrial Microbiology
 - BIOL 330 Advanced Concepts in Genetics
 - BIOL 333 Molecular Genetics (15 points)
 - BIOL 334 Evolutionary Genetics (15 points)
 - BIOL 332 Genetics and Evolution of Invasive Species
 - BIOL 371 Evolutionary Ecology
- Plus recommended courses from lists above

Plant Biotechnology

100-

- BIOL 111 Cellular Biology and Biochemistry
 - BIOL 112 Ecology, Evolution and Conservation
 - BIOL 113 Diversity of Life
 - CHEM 112 Structure and Reactivity
 - STAT 101 Statistics 1
- Plus recommended courses from list above

200-

- BIOL 209 Introduction to Biological Data Analysis
 - BIOL 254 Principles of Plant Physiology
 - BIOL 213 Microbiology and Genetics
 - BIOL 231 Foundations in Molecular Biology
 - BIOL 271 Evolution
 - BIOL 253 Cell Biology 1
 - BCHM 281 Practical Biochemistry
- Plus recommended courses from lists above

300-

- BIOL 333 Molecular Genetics (15 points)
- BIOL 334 Evolutionary Genetics (15 points)
- BIOL 335 Bioinformatics and Genomics
- BIOL 352 Plant Development and Biotechnology
- BIOL 330 Advanced Concepts in Genetics

BIOL 351 Cell Biology

Plus recommended courses from lists above

Ecology*

*Subject to UNZ CUAP approval due December 2014.

To qualify for an endorsement in Ecology a student must be enrolled for a Bachelor of Science in Biological Sciences and must complete the 360 point requirement for the BSc.

The following courses are required for the endorsement:

100-

BIOL 111 Cellular Biology and Biochemistry
 BIOL 112 Ecology, Evolution and Conservation
 BIOL 113 Diversity of Life
 STAT 101 Statistics 1

200-

BIOL 209 Introduction to Biological Data Analysis, or
 STAT 201 Applied Statistics, or
 STAT 202 Regression Modelling
 BIOL 270 Ecology
 BIOL 271 Evolution

300-

BIOL 309 Experimental Design and Data Analysis for Biologists
 And at least 60 points from:
 BIOL 354 Animal Ecophysiology
 BIOL 371 Evolutionary Ecology
 BIOL 373 Behavioural Ecology
 BIOL 374 Marine Ecosystems

Environmental Science

To qualify for an endorsement in Environmental Science a student must be a Biology or Chemistry or Geography or Geology major and complete the 360 points requirements for the Bachelor of Science. Of those 360 points, students must complete successfully the required courses listed under Sections A and B below.

A: Core knowledge and skills for all BSc students endorsed in Environmental Science

BIOL 375 Freshwater Ecosystems

BIOL 377 Global Change and Biosecurity

BIOL 378 Population Ecology and Conservation

BIOL 379 Sustaining Natural Biodiversity in Primary Production Systems

100-

CHEM 114 Foundations of Chemistry
 GEOG 106 Global Environmental Change
 GEOG 109 Forces in Nature
 GEOL 111 Planet Earth: An Introduction to Geology
 GEOL 112 Understanding Earth History

200-

BIOL 210 Vertebrate Biology
 BIOL 211 Insect Biology
 BIOL 212 Marine Biology
 BIOL 214 Diversity of Algae (up to 2009)
 BIOL 215 Plant Diversity
 BIOL 272 Principles of Animal Behaviour
 BIOL 273 New Zealand Biodiversity and Biosecurity
 GEOG 205 Introduction to Geographic Information Systems

300-

FORE 444 Sustaining Natural Biodiversity on Private Land

GEOG 323 Geospatial Analysis in the Social and Environmental Sciences

Environmental Science (15 credits):

Knowledge of science in the Maori world
Level: SCIM 101 Science, Maori and Indigenous
Knowledge

B: Core knowledge and skills for BSc students endorsed in Environmental Science to the following majors

Chemistry (45 credits):

Knowledge of basic chemistry: at least one
Chemistry course at 100-level
Skills in environmental fieldwork: BIOL 270 Ecology

Practical Chemistry (45 credits):

Relevant lab skills: CHEM 281 Practical Chemistry

Relevant instrumental skills: CHEM 382
Instrumental Methods
Environmental chemistry: CHEM 324 Analytical
and Environmental Chemistry

Geography (15 credits):

Skills in environmental fieldwork: GEOG 211
Environmental Processes: Research Practice

Chemistry (15 credits):

Knowledge of basic chemistry: at least one
Chemistry course at 100 level

Practical Chemistry (30 credits):



GEOG 305 Environmental Hazards and Management
 GEOG 309 Research Methods in Geography

GEOL 245 Earth System Science
 GEOL 354 Geodynamics and Geohazards

See also General Course and Examination Regulations

Note: The Bachelor of Speech and Language Pathology with Honours was subject to a review in 2012 that has resulted in some amendments to the degree regulations and programme of study. Changes to the programme of study only affect students enrolling in the Intermediate Year.

The overarching goal of the Bachelor of Speech and Language Pathology with Honours is to produce graduates ready for entry-level of clinical practice as a speech-language pathologist. The programme will meet both national and internationally-recognised standards regarding the development of academic knowledge and clinical skills.

1. A

Every candidate for the Degree of Bachelor of Speech and Language Pathology with Honours shall have been approved as a candidate by the Dean of Science.

2.

To qualify for the Degree a candidate must follow a course of study as laid down in the Schedule to these Regulations consisting of not fewer than 4 EFTS (four years of full-time study) and be credited with:

- (a) successful completion of courses in the Intermediate Examination;
- (b) passes in the Examinations prescribed for the first, second and third professional years, and
- (c) satisfactory performance in such other practical work as may be prescribed in order to complete a minimum of 300 hours of supervised clinical practice.

Note: Entry into the First Professional Examination is limited. Candidates must submit an enrolment application and a separate application form to the Head of the Department of Communication Disorders.

3. A

- (a) All students planning to complete a Bachelor of Speech and Language Pathology with Honours must apply for admission to the degree programme prior to their first professional year.

Applications for admission to the first professional year must be received at the Department of Communication Disorders on the prescribed form no later than the first Friday of December in the year preceding desired entry. Students must also Apply to Enrol.

- (b) To be eligible for admission students must have completed the eight compulsory courses of the Intermediate Year (or equivalent) totalling 120 points. Selection is based on academic merit and a statement of interest.
- (c) Prospective students who are seeking entry but have not completed the compulsory courses are encouraged to discuss their circumstances with the Head of Department.
- (d) Admission to the degree is normally limited to 40 candidates.
 Note: See Limitation of Entry Regulations.
- (e) Admission to CMDS 281 and CMDS 282, the practicum courses in the First Professional Year, will be granted only to students who have been formally admitted to the degree programme. Admission to other professional courses may be approved for students enrolled in other degrees at the discretion of the Head of Department.
- (f) The selection into the degree programme is by the Admissions Committee of the Department of Communication Disorders who have been delegated authority by the Academic Board. The Admissions Committee normally meets during the first week of the first professional year.

CMDS 482 and CMDS 484 by 15 October of the year preceding the course. Students pre-register by completing the application form available through the Department of Communication Disorders. Students who do not pre-register may not be admitted or copt under optional circumstances and by the approval of the Dean of Science.

5. Examinations

A candidate shall be required to pass each Examination for the first, second and third professional years as a whole. In recommending a candidate for a pass in any of these Examinations, the Dean of Science shall take into consideration the candidate's performance in all of the subjects of the Examination.

In optional circumstances, a candidate who has failed to pass an Examination as a whole may be credited with some of the subjects of the Examination. The candidate may then present, in a subsequent year, the remaining subjects of that Examination together with such subjects of the

succeeding Professional Year as the Academic Board may permit.

6. A candidate's course of study

The personal course of study of every candidate shall be as approved by the Dean of Science. In special cases the Academic Board may approve a course of study which does not conform to these or other relevant Regulations. Any application under this Regulation must be submitted in writing to the Head of the Department of Communication

Second Professional Year

All courses are compulsory.

2015 / / / /				
CMDS 320	Spoken and Written Language Disorders in Education	15	S1	P: CMDS 222 (SPTH 222) and CMDS 232 (SPTH 232) R: CMDS 672
CMDS 351	Fluency Disorders	15	S2	P: CMDS 162 or CMDS 262 R: CMDS 662
CMDS 363	Motor Speech Disorders	15	S2	P: CMDS 162 or CMDS 262 R: CMDS 673
CMDS 365	Dysphagia and Related Disorders - Diagnosis	15	S1	P: CMDS 161 and (CMDS 162 or CMDS 262) R: CMDS 669
CMDS 367	Voice Science and Disorders	15	S2	P: CMDS 162 or CMDS 262 R: CMDS 666
CMDS 369	Aphasia and Related Disorders	15	S1	P: CMDS 162 or CMDS 262 R: CMDS 670
CMDS 381	Applied Research and Clinical Practice ³	15	SU2 S1	P: CMDS 281, CMDS 282, CMDS 263 R: CMDS 671
CMDS 382	Clinical Practice ⁴	15	SU2 S2	P: CMDS 281, CMDS 282, CMDS 263 R: CMDS 676

Third Professional Year

All courses are compulsory.

2015 / / / /				

A

2. 



Schedule to the Regulations for the Graduate Certificate in Public Safety

Further information about courses can be found at www.canterbury.ac.nz/courses

Compulsory courses (45 points):

		2015		/// /
PUBS 301	Public Safety Doctrine	15	S1	P: Admitted to Graduate Certificate in Public Safety.
PUBS 302	International Disaster Management	15	S1	P: Admitted to Graduate Certificate in Public Safety
PUBS 304	Current Issues in Emergency Management	15	S2	P: Admitted to Graduate Certificate in Public Safety and subject to approval by Programme Director. RP: PUBS 301 Public Safety Doctrine

Elective courses (15 points):

		2015		/// /
PUBS 306	Independent Study in Public Safety	15	A	P: Admitted to Graduate Certificate in Public Safety and subject to approval by Programme Director. RP: PUBS 301 Public Safety Doctrine

Or any 15 point 100-400 level course relevant to the endorsement as approved by the Programme Director.

Compulsory courses (45 points):

		2015		/// /
PUBS 301	Public Safety Doctrine	15	S1	P: Admitted to Graduate Certificate in Public Safety.
PUBS 303	Current Issues in Search and Rescue	15	S2	P: Admitted to Graduate Certificate in Public Safety and subject to approval by Programme Director. RP: PUBS 301 Public Safety Doctrine
PUBS 305	Science of Search and Rescue	15	S1	P: Admitted to Graduate Certificate in Public Safety

Elective courses (15 points):

		2015		/// /
PUBS 306	Independent Studies/Term 1 59-77752210 alS210 0 181 1 0 0 1 22915S2P: Admitted to Graduate Certificate in Public Safety and subject to approval by Programme Director. RP: PUBS 301 Public Safety Doctrine			

Schedule A to the Regulations for the Degree of Bachelor of Science with Honours

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

A. ~~100~~ *

*Subject to UNZ CUAP approval due December 2014.

ASTR 480, PHYS 407, ASTR 422, ASTR 423 or ASTR 425, PHYS 415, and four other courses from PHYS 411-460, MDPH 403, MDPH 406, with a maximum of two courses from PHYS 440-460.

Note: All courses may be offered in any one year. With the approval of the Head of Department, up to two courses may be replaced by appropriate courses from another subject.

Note: The choice of courses is subject to the approval of the Head of Department.

P:

- (1) 90 points of 300-level of ASTR or PHYS courses; and
- (2) 30 points of 300-level of MATH courses.

Note: Students will normally be expected to have taken PHYS 311, PHYS 312 or PHYS 313, and PHYS 326.

A. ~~100~~ *

Courses totalling at least 1.0 EFTS and a project (BCHM 480) as approved by the Director of Biochemistry. Normally courses are selected from BCHM 401 (BIOL 436), BCHM 403 (BIOL 435), BCHM 405 (BIOL 434), BCHM 406 (BIOL 430), BCHM 420, and CHEM 421-422. Other suitable courses include BCHM 407-409, BIOL 431-432, BIOL 451, BIOL 491.

P:

- (1) BCHM 221 and BCHM 222, or BCHM 201; and
- (2) BCHM 202 (BIOL 231) or BIOL 230; and
- (3) BCHM 212 (CHEM 212) or BCHM 205 (CHEM 232) or ENCH 241; and
- (4) BCHM 221 and BCHM 222, or BCHM 201; and
- (5) BCHM 281 (or CHEM 281); and
- (6) At least one of BCHM 206 (CHEM 242) or BCHM 253 (BIOL 253); and
- (7) BCHM 301 (BIOL 331); and
- (8) BCHM 302 (CHEM 325); and
- (9) BCHM 381; and
- (10) 15 additional points normally from CHEM 321, 322, 324, 362, 381, BIOL 313, 330, 351 or 352.

A. ~~100~~ *

*Subject to UNZ CUAP approval due December 2014.

Four courses and a research project (BIOL 480). BIOL 405 and at least two courses are to be selected from BIOL 400-level of courses. The remaining course may be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

P:

- (1) 60 points from 300-level of BIOL courses; and
- (2) BIOL 309 or GEOG 309 or PSYC 206 or STAT 201 or STAT 202.

A. ~~100~~ *

*Subject to UNZ CUAP approval due December 2014.

Four courses and a research project (BIOT 480). The courses are BIOL 405 and BIOL 491, plus at least one course selected from BIOL 430-435, BIOL 493. The remaining course may be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

P:

- (1) BIOL 252 or BIOL 254; and
- (2) BIOL 352; and
- (3) At least 30 points selected from BIOL 313, BIOL 330, BIOL 331, BIOL 333, BIOL 335.

Note: students will normally be expected to take BIOL 309. BIOL 333 and BIOL 335 are 15 point courses.

A. ~~100~~ *

*Subject to UNZ CUAP approval due December 2014.

Four courses and a research project (CEMB 480). BIOL 405 and at least two courses are to be selected from BIOL 430-436, BIOL 491, BIOL 493. The remaining course may be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

P: At least 60 points from BCHM 301, BIOL 313, BIOL 330, BIOL 331, BIOL 333, BIOL 334, BIOL 335, BIOL 351, BIOL 352.

Note: students will normally be expected to take BIOL 309.

A. ~~100~~ *

CHEM 480 and all four of courses CHEM 421-424.

Note: With the approval of the Head of Department, one of the courses CHEM 421-424 may be replaced by Honours 400-level courses from another subject with a total EFTS of at least the same value.

P:

- (1) At least 60 points from CHEM 211–223 and 231–273; and
- (2) 30 points from CHEM 281–282, BCHM 281 and CHEM 381–382; and
- (3) CHEM 333, 361, 362, 373, 381 and 382.

Note: With the approval of the Head of Department, 30 points from CHEM 333 and CHEM 361–373 may be replaced by CHEM 324 or CHEM 325.

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

Applications in other areas

CAMS 449 and eight approved courses chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449). With the approval of the Programme Co-ordinator, candidates may substitute one or two courses from other subjects in an applications area.

- P.
- (1) 45 points from MATH 201, MATH 202, MATH 203, MATH 220, MATH 240 and

- (including GEOG 309 and at least 28–30 other points in 300-level of Geography courses); or
- (2) to have completed 112–120 points at 300-level of which 52–60 are in Geography and 56–60 are in subjects approved by the Head of Department.

Notes:

Seven courses chosen from GEOL 473–489 and a research project (GEOL 490), with the approval of the Head of the Department of Geological Sciences.

Notes:

1. With the approval of the Head of the Department of Geological Sciences, up to three courses from another relevant subject may replace three of the courses, or one full year course from another relevant subject may replace two courses.
 2. Practical and fieldwork may be required as part of any GEOL 473–489 courses.
 3. Not all courses may be offered in any one year.
- P. GEOL 240 and GEOL 241 (or equivalent fieldwork); and
- (3) at least 45 points from GEOL 232–238 or GEOL 242–245; and
 - (4) normally at least 60 points from ASTR, BIOL, CHEM, COSC, GEOG, MATH, PHYS, or STAT courses; and
 - (5) GEOL 351 and GEOL 352 (or equivalent fieldwork); and
 - (6) 60 points from other 300-level of courses.

Notes:

1. An additional 30 points at GEOL 300-level is strongly advisable.
2. The above courses to have been passed with a grade average that meets the approval of the Head of Department (the normal requirement is at least a B+ grade average).

Notes:

MATH 449 and eight courses chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449). Normally one of the eight courses must be MATH 443 if the student has not been credited with MATH 343 previously. Normally at least six courses will be chosen from the MATH course list.

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) 60 points from MATH 301–394; and
- (3) An additional 30 points from MATH 301–394 and STAT 301–394 or other approved courses.

Notes:

MPHI 450, and seven courses chosen from MATH 401–490 (other than MATH 449) and PHIL 431–470. Normally one of the seven courses must be MATH 443 if the student has not been credited with MATH 343 previously. Normally two courses will be chosen from the PHIL course list and five courses from the MATH course list.

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.

Notes:

PHYS 407, MAPH 480, and a further seven courses, of which two-three are to be chosen from MATH 401–443 and the remainder from PHYS 411–460, ASTR 421–425. A maximum of two courses may be chosen from PHYS 440–460 systems.

at least four courses in ECON and at least three courses in MATH.

P.

- (1) STAT 213 or (STAT 212 and STAT 214); and
- (2) 45 points from MATH 201–294, normally including MATH 201, 203, 240; and
- (3) 60 points from 300-level of 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.

I.

MATH 449 or STAT 449; and eight courses chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449). Normally one of the eight

courses will be MATH 443 if the student has not been credited with MATH 343 previously, and normally one of the eight courses will be STAT 464 if the student has not been credited with STAT 213 or STAT 214 previously. At least three courses must be chosen from the MATH course list and at least three courses must be chosen from the STAT course list.

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.

See also General Course and Examination Regulations.

1.

Every candidate for the degree of Master of Antarctic Studies, before enrolling for the degree, shall have

- (a) either
 - i. qualified for the Postgraduate Certificate in Antarctic Studies; or
 - ii. qualified for the Postgraduate Diploma in Antarctic Studies.
- (b) or been admitted ad eundem statum to enrol for the Master of Antarctic Studies; and
- (c) presented evidence of ability to advance to an academic study by normally having achieved a B average in 300-level of courses and above;
- (d) Every candidate for the degree shall have been approved as a candidate by the Dean of Science.

2. A.

I.

The degree of Master of Antarctic Studies may be awarded with Honours where the candidate has offered both Parts I and II. There shall be two classes of Honours: First Class Honours and Second Class Honours. Second Class Honours shall be awarded in two divisions: Division I and Division II.

A candidate who offers Part II by thesis only may be awarded the degree of Master of Antarctic with Distinction or Merit.

Note: The award of Distinction indicates a grade average in the range A+ to A-; the award of Merit indicates a grade average of B+.

(A)

3.

The programme for the degree of Master of Antarctic Studies consists of Part I and Part II.

- (a) A candidate admitted under (i) of Regulation 1(a) or Regulation 1(b) shall offer both Parts.
- (b) A candidate admitted under (ii.) of Regulation 1(a) for a Master of Antarctic Studies shall offer Part II only.
- (c) All students admitted to the Master of Antarctic Studies will complete a coherent programme of study approved by the Programme Director.

4.

A candidate may be enrolled for the degree of Master of Antarctic Studies either on a full-time or part-time basis. A part-time candidate is one who, because of employment, health, family or other reasons, is unable to devote his or her full-time to study. Part-time enrolment requires the approval of the Dean of Science.

5.

6. **Requirements for Part I**
- The requirements for Part I shall be a Postgraduate Certificate in Antarctic Studies, 0.5 EFTS/60 points, and appropriate 400-level courses of at least 0.5 EFTS/60 points, approved by the Programme Director and listed in the University of Canterbury or other New Zealand University Calendars relevant to a coherent programme of study for each student. The total course weight of the Part I programme will be at least 1.00 EFTS.
 - Candidates must satisfy the Programme Director that they have the necessary prerequisite knowledge to undertake the proposed courses from the Schedule.
 - Re-enrolment in Part I to repeat a failed course or offer any other course in its place will only be permitted in exceptional circumstances with the permission of the Programme Director and the Dean of Science.
 - A candidate who fails a course offered for Part I and is not successful under Regulation 6(c), shall not be awarded a pass in Part I and shall not be permitted to proceed to Part II, but will

- be awarded a Certificate of Proficiency for each course passed.
- A candidate who passes all of the courses for Part I, but who does not attain a B grade or a C grade or better shall not be permitted to proceed to Part II (unless special permission has been granted by the Dean of Science), but may apply for the award of the Postgraduate Diploma in Antarctic Studies. The candidate may also apply to the Programme Director to repeat relevant courses to obtain a B grade or a C grade or better.
- A candidate who passes all the courses for Part I and is eligible to proceed to Part II, but who chooses not to do so, may apply for the award of the Postgraduate Diploma in Antarctic Studies.

7. **Requirements for Part II**

Part II shall consist of the preparation of a thesis to the value of 1.0 EFTS embodying the results of an investigation in a subject area approved by the Programme Director. The requirements of the General Course and Examination Regulations, Part L, shall be met.

Schedule to the Regulations for the Degree of Master of Antarctic Studies

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

Part I

- Courses listed in the schedule for the award of the Postgraduate Certificate in Antarctic Studies;
- Other 400-level courses relevant to a coherent programme of study.

A total course weighting of at least 1.0 EFTS must be completed.

Part II

ANTA 690 Antarctic Studies Masters Thesis (1.0 EFTS)

See also General Course and Examination Regulations.

1. **Requirements for Entry into Year 1**
- Either:
 - qualified for the award of the Degree of Bachelor of Speech and Language Pathology with Honours; or
 - qualified for the award of the Degree of Bachelor of Science, the Degree of Bachelor of Arts, the Degree of Bachelor of Engineering - Electrical, the Degree of Bachelor of Engineering - Mechanical, the Degree of Bachelor of Teaching and Learning (Early Childhood), or the Degree of Bachelor of Teaching and Learning (Primary), with relevant undergraduate coursework, as

- approved by the Head of the Department of Communication Disorders; or
- been admitted ad eundem statum as entitled to enrol for the degree of Master of Audiology; and
- been approved as a candidate for the degree by the Dean of Science

Note: Entry into Year 1 of the Master of Audiology is limited. Candidates must submit an enrolment application and a separate application form to the Head of the Department of Communication Disorders.

2. **Requirements for Entry into Year 2**

A candidate shall normally be enrolled as a full-time candidate. A full-time candidate is one who throughout the calendar year regards study and

CMDS 653	Audiological Rehabilitation	0.1250	S1	P: Approval of Head of Department. RP: BSc, BSLP(Hons)
CMDS 654	Clinical Practicum I	0.2500		P: Approval of Head of Department. RP: BSc, BSLP(Hons)
CMDS 655	Advanced Topics in Audiology	0.1250	S2	P: Approval of Head of Department, CMDS 651. RP: BSc, BSLP(Hons)
CMDS 656	Advanced Diagnostic Audiological Evaluation	0.1250	S2	P: Approval of Head of Department, CMDS 652. RP: BSc, BSLP(Hons)
CMDS 657	Advanced Audiological Rehabilitation	0.1250	S2	P: Approval of Head of Department, CMDS 653. RP: BSc, BSLP(Hons)

Year 1 Total EFTS 1.0000 EFTS

Year 2

2015 / / / /				



points/1.00 EFTS must be completed successfully for each part, totalling a minimum of 240 points/2.00 EFTS.

- (b) A candidate admitted under regulation 1(a) i. will complete MGIS Part II by Thesis only, 120 points/1.00 EFTS.
- (c) All students admitted to the Master of GIS will complete a coherent programme of study approved by the Director: GIS.

4. Award of Honours

- (a) The degree of Master of GIS may be awarded with honours. There shall be two classes of honours: First class Honours and Second Class Honours. Second Class Honours shall be awarded in two divisions: Division I and Division II.
- (b) The degree of Master of GIS may be awarded with Distinction or Merit, where the candidate has completed Part II by thesis only.

5. Part-time enrolment

A candidate may be enrolled for the degree of Master of GIS either on a full-time or part-time basis. A part-time candidate is one who, because of employment, health, family or other reasons, is unable to devote his or her full time to study. Part-time enrolment requires approval from the Director: GIS.

6. Course of study

- (a) A candidate offering both Part I and Part II shall normally follow a course of study for not less than two years of full-time study, and Part I will be completed in not less than one year and no more than two years of part-time study.
- (b) The time limits for the thesis or research project will normally be no less than one year and no more than two years of full-time study.
- (c) A part-time candidate shall be required to follow a programme of study with time limits determined by the Dean of Science on the recommendation of the Director: GIS.

7. Requirements

- (a) The requirements for Part I shall be GISC 401, GISC 402, GISC 403, and GISC 404, two or more of GISC 405–417, with the option of any two other 400-level courses (to a maximum of 0.25 EFTS) as approved by the Director: GIS and listed in the University of Canterbury Calendar. The total course weight for the Part I programme will be at least 1.0 EFTS. Please refer to the schedule at the

end of these regulations.

- (b) Candidates must satisfy the Director: GIS, that they have the necessary prerequisite knowledge to undertake the proposed courses from the schedule.
- (c) Re-enrolment in Part I to repeat any failed courses or offer any other courses in its place will only be permitted in exceptional circumstances and requires a recommendation from the Director: GIS and the permission of the Dean of Science.
- (d) A candidate who fails any courses offered for Part I and is not successful under Regulation 7(c), shall not be awarded a pass in Part I and shall not be permitted to proceed to Part II, but will be awarded a Certificate of Proficiency for each course passed.
- (e) A candidate who passes all of the courses for Part I, but who does not attain a B grade or better shall not be permitted to proceed to Part II (unless special permission has been granted by the Dean of Science), but may apply for the award of the Postgraduate Diploma in Geographic Information Science (PGDipGIS). The candidate may also apply to the Director: GIS to repeat relevant courses to obtain a B grade or better.
- (f) A candidate who passes all the courses for Part I and is eligible to proceed to Part II, but who chooses not to do so, may apply for the award of the Postgraduate Diploma in Geographic Information Science (PGDipGIS).

Note: Course work shall consist of approved courses at 400-level or higher (to a maximum of 0.25 EFTS) from the University of Canterbury or another tertiary education institution in New Zealand as approved by the Director: GIS.

8. Thesis or research project

- (a) Part II shall consist of the preparation of a thesis to the value of 1.0 EFTS embodying the results of an investigation in a subject area approved by the Director: GIS. The requirements of the General Course and Examination Regulations, Part L, shall be met.
- (b) If the examiners' final examination is that the thesis be awarded a failing grade, the degree of Master of Geographic Information Science shall not be awarded.

9. Weighting

The weighting ratio Part I and II is: 1:1.

Schedule to the Regulations for the Degree of Master of Geographic Information Science

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

Part I

All of the following four courses:

- (a) GISC 401 Foundations of Geographic Information Science (0.125 EFTS)
- (b) GISC 402 Geographic Information Science Research (0.125 EFTS)
- (c) GISC 403 Cartography and Geovisualisation (0.125 EFTS)
- (d) GISC 404 Geospatial Analysis (0.125 EFTS)

OR A

At least one of the following courses:

- (a) GISC 405 GIS Programming and Databases (0.125 EFTS)
- (b) GISC 406 Remote Sensing for Earth Observation (0.125 EFTS)

At least one of the following courses:



See also General Course and Examination Regulations.

1. Entry requirements

Every candidate for the degree of Master of Hazard and Disaster Management (MHDM), before applying to enrol in the degree, shall have

- (a) qualified for a university degree which is relevant to hazard and disaster management, normally with a B+ average or higher in the final year; and
- (b)
 - i. normally at least 90 points/0.75 EFTS from 300-level courses in the schedule to the BSc regulations; these courses to have been passed with a grade average that meets the approval of the Programme Director (the normal requirement is at least a B grade average); and
 - ii. 15 points/0.125 EFTS from STAT 100-level courses or equivalent.

Note: This prerequisite may be waived by the Head of Department if the student can demonstrate an existing suitably high level of ability in Mathematics and/or Statistics.

- (a) GISC 410 GIS 2.0 (0.125 EFTS) (Offered by Victoria University of Wellington)
- (b) GISC 411 GIS in Health (0.125 EFTS)
- (c) GISC 412 Spatial Algorithms and Programming (0.125 EFTS)
- (d) GISC 413 Special Topic: Geomatic Data Acquisition Techniques (0.125 EFTS)
- (e) GISC 415 Geographic Information Systems (GIS) Internships (0.125 EFTS)
- (f) GISC 416 Special Topic (0.125 EFTS)

And/or two other courses at 400-level or higher (to a maximum of 0.25 EFTS) relevant to a coherent programme of study with approval of the Director: GIS.

A total course weighting of at least 1.0 EFTS must be completed.

Part II

GISC 690 GIS Thesis (1.0 EFTS)

2. Admission

Students planning to complete a Master of

14 (or 0) 6 (f Hazard) 12 (d) JT Tfo 2 (0) 96 Actual T t. 19.9 () 10 Tw 0 -1.365 omn) 0

- ii. qualify for a bachelor's degree and if necessary pass a qualifying programme consisting of such courses from the schedule to the regulations for the Degree of Bachelor of Science as may be required by the Dean of

- Such a candidate may offer Part II for examination if he or she has a grade average (including any failed courses) of at least B- (some departments require a higher grade average). If a candidate qualifies for a pass in Part I but is not permitted to offer Part II for examination, or if such a candidate chooses not to offer Part II for examination, he or she may apply for the award of the Postgraduate Diploma in Science.
- iii. A candidate who fails more than 0.25 EFTS of the Part I programme shall not be awarded a pass in Part I as a whole and shall not be permitted to offer Part II for examination, but he or she will be awarded a Certificate of Proficiency for each course passed.
 - i. A candidate who passes all the courses for Part I, but who does not attain a grade average of at least C+ (some departments/school require a higher grade average), or who otherwise does not attain a standard satisfactory to the Dean of Science in the Part I requirements as a whole, shall not be permitted to repeat any part of the Part I programme or to offer Part II for examination, but may apply for the award of the Postgraduate Diploma in Science.
 - . Notwithstanding anything else in Regulation 7(a), before offering Part II for examination, a candidate must pass Part I to the standard required by the Head of Department/School, which standard may be specified in Schedule A to these regulations.
 - (b) Notwithstanding Regulation 7(a), a candidate offering Part I who qualifies for consideration for an aggregate award in some or all of the courses (see General Course and Examination Regulation H) may elect either (i) to accept for the courses affected the aggregate grades recommended by the examiners under that Regulation; or (ii) to sit a further examination and/or present again all or some of the assessed work if that examination or assessed work formed the basis of the aggregate application. The time or times for representation of work or further examination will be set by the Dean of Science after consulting the Head of Department/School.
 - (c) The total course weight of the Part I programme, if all courses are offered offering Pa()o

institution. A Head of Department/School may give approval for work to be carried out at another institution in New Zealand for a period not exceeding one month, but permission of the Dean of Postgraduate Studies is required if the period exceeds one month, or if any of the work, including field work, is to be carried out overseas.

13. 
(a)



18. Enrolment in MSc Part I

A candidate who is enrolled for MSc Part I may at any





P: 84 points in appropriate 300-level courses in Science, Engineering and Forestry approved by the Co-ordinator. A minimum B grade in relevant 300-level courses is normally required.

*Subject to UNZ CUAP approval due December 2014.

Part I: Four courses. BIOL 405 and at least two courses are to be selected from BIOL 430, BIOL 431, BIOL 470, BIOL 478. The remaining course may be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

Part II: A thesis (EVOL 690) which shall normally be presented no later than 16 months after the date of enrolment for Part II. Students must consult the MSc regulations for details of other requirements for this degree. In determining the class of honours, Part I and Part II are weighted in the ratio 2:3.

P:

- (1) BIOL 271; and
- (2) 60 points selected from BIOL 330, BIOL 332, BIOL 334, BIOL 335, BIOL 371, BIOL 373; and
- (3) BIOL 309 or equivalent background in statistics.

Part I: A minimum of 120 points (1.00 EFTS) from FINC 601-680. Enrolment in any combination of courses is subject to the approval of the Head of Department. Candidates can normally attempt each course on offer only once.

Part II: A thesis (FINC 699)

The weighting of Parts I and II in the assessment is 1:1.

P:

Either: a BSc or BCom with major in Finance including:

- (1) ECON 202; and
- (2) ECON 213 (or any 30 points from STAT 200-level of courses); and
- (3) FINC 205; and
- (4) FINC 331.

Students require at least a B+ average in 300-level FINC courses.

Or: a bachelors degree in a subject other than Finance but including:

- (1) ECON 213 (or any 30 points from STAT 200-level of courses); and
- (2) FINC 331; and
- (3) an additional 30 points in 300-level FINC courses.

Students require at least an A- average in 300-level FINC courses.

Part I: Courses equivalent to 1.0 EFTS or 120 points from GEOG 401-420 and GISC 403-413 and GISC 416, with the approval of the Head of Department. Enrolment in GEOG 420 Research Project is recommended. Note: Not all courses will be offered in any one year.

Part II: Thesis (GEOG 695).

In determining the class of Honours Part I and Part II are weighted in the ratio 1:1.

P: Students will normally be expected to:

- (1) either have passed 84-90 points in 300-level courses approved by the Head of Department (including GEOG 309 and at least 28-30 other points in 300-level of Geography courses); or
- (2) to have completed 112-120 points at 300-level of which 56-60 points are in Geography and 56-60 points are in subjects approved by the Head of Department.

The course of study for Part I is eight courses chosen from GEOL 473-489 with the approval of the Head of the Department of Geological Sciences. Part II is a thesis (GEOL 690) which shall normally be presented no later than 16 months after the date of enrolment for Part II.

In determining the class of Honours, Part I and II are weighted in the ratio of 1:2.

In order to proceed to Part II, the Head of Department normally requires the student to have attained a B+ grade average in Part I. Students who fail to meet this requirement, and who are declined entry to Part II by the Head of Department, may apply to have other courses credited towards the Postgraduate Diploma in Science.

Notes:

1. With the approval of the Head of the Department of Geological Sciences, up to three courses from another relevant subject may replace three of the courses, or one full year course from another relevant subject may replace two of the courses.
2. Practical and fieldwork may be required as part of any GEOL 473-489 courses.
3. Not all courses may be offered in any one year.

P: GEOL 351 and GEOL 352 (or equivalent fieldwork), and an additional 60 points from other GEOL 300-level of courses, these prerequisite courses to have been passed with a grade average that meets the approval of the Head of Department.

(the normal requirement is at least a B grade or a C grade).

P: 90 points at 300-level or approved by the Head of Department.

The Hazard and Disaster Management programme is MSc Part II only and consists of a thesis totalling 1.0 EFTS (120 points).

Part I: Courses from HAPS 401-433/HAPS 480 to total or all minimally 1.00 EFTS, the selection to be approved by the Co-ordinator(s) of HPS Studies, in consultation with the Heads of Department/Schools in which the courses selected are taught. Normally these courses will include HAPS 401 and HAPS 402.

With the approval of the Co-ordinator(s) of HPS Studies, as much as 0.250 EFTS may be drawn from 400-level courses outside the HAPS list.

Part II: A thesis (HAPS 690). The credit weighting of Parts I and II shall be 1:1.

P: 84 points in 300-level courses of the BSc degree approved by the Coordinator of HPS Studies.

Part I: Eight courses chosen from MATH 401-490 and STAT 401-490 (other than MATH 449 or STAT 449). Normally one of the eight courses must be MATH 443 if the student has not been credited with MATH 343 previously. Normally at least six courses will be chosen from the MATH course list.

Part II: A thesis (MATH 690).

The weighting of Parts I and II shall be in the ratio 1:2.

P: Part I:

- (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) 60 points from MATH 301-394; and
- (3) An additional 30 points from MATH 301-394 and STAT 301-394 or other approved courses.

Part I: Six or seven courses from MDPH 401-410 and one course from PHYS 410-460. With the approval of the Head of Department, one course may be replaced by an appropriate course from another subject. Note: the choice of courses is subject to the approval of the Head of Department of Physics and Astronomy.

Part II: A thesis (MDPH 690) which shall normally be presented no later than 12 months after the date of enrolment for Part II.

P: Part I:

- (1) MATH 103, MATH 109 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 STAT 301-394 and MATH 301-394 or other approved courses.

*
*Subject to UNZ CUAP approval due December 2014.

Evolutionary Biology	16	24	28	36	2:3
Finance	12	24	24	36	1:1
Geography	12	12	24	24	1:1
Geology	16	24	28	36	1:2
Hazard and Disaster Management	16	24	28	36	1:2
History and Philosophy of Science	24	24	36	36	1:1
Management Science	12	24	24	36	1:1
Mathematics	24	24	36	36	1:2
Medical Physics	12	12	24	24	2:3
Medical Physics (Clinical)	12	12	24	24	2:3
Microbiology	16	24	28	36	2:3
Philosophy	24	24	36	36	1:1
Physics	12	12	24	24	2:3
Plant Biology	16	24	28	36	2:3
Psychology	24	24	36	36	1:1
Speech and Language Sciences (Clinical and Non-clinical)	12	12	N/A	N/A	N/A
Statistics	24	24	36	36	1:2
Zoology	16	24	28	36	2:3

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Notes:

Theses and dissertations must be completed within the timeframes stated above in order to be eligible for Honours, Distinction or Merit (See MSc Regulations 14 and 15).

In exceptional circumstances, the Head of Department/School/Programme, acting upon the recommendation of the Senior Supervisor, may grant short extensions of up to 4 months.

The Dean, acting upon the recommendation of the Head of Department, may grant additional extensions where further exceptional circumstances warrant.

Theses submitted after extension(s) are not eligible for

Honours, Distinction or Merit.

All extensions incur additional student enrolment fees for the period of the extension.

Candidates will commence their MSc Part II enrolment on the first day of semester 1 or semester 2, or another date by agreement of the Head of Department/School/Programme.

Thesis submission deadline will be 12 months after the date of enrolment.

Where the candidate has offered MSc as Part I and Part II, the weighting of Part II in the overall MSc degree grade is 60%.

See also General Course and Examination Regulations.

The Master of Speech and Language Pathology degree is intended to produce graduates ready for entry-level of clinical practice as a speech-language pathologist/therapist. The degree is conducted over 80 weeks of full-time study (or its equivalent part-time) distributed over two extended academic years.

Every candidate for the Degree of Master of Speech and Language Pathology shall follow a course of study approved by the Dean of Science as laid down in these Regulations consisting of not fewer than 240 points (2 EFTS) and not more than 270 points.

1. Entry Requirements

Every candidate for the degree of Master of Speech and Language Pathology shall have

- (a) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (b) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (c) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (d) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (e) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (f) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (g) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (h) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (i) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (j) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (k) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (l) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (m) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (n) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (o) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (p) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (q) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (r) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (s) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (t) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (u) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (v) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (w) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (x) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (y) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or
- (z) a Bachelor (Hon) Degree with a minimum of 60 credits (120 ECTS) (or its equivalent) from a university or other institution of higher learning, or

those courses are to be passed within 12 months of initial enrolment for this degree if not taken prior to entry to Part I.

4. Assessment

- (a) If a candidate fails any of the component assessments of the courses listed in the Master of Speech and Language Pathology Schedule they will be required to retake the assessment and attain a standard satisfactory to the Head of Department. This option can only be enacted once per course and for a maximum of two courses in each of Part I and Part II.
- (b) If a candidate fails the clinical competency assessment of CMDS 664, CMDS 668, CMDS 671, or CMDS 676, he/she shall not be permitted to

repeat that assessment and will instead be required to repeat the course. This action can only be enacted once per course.

5. Enrolment

- (a) A candidate shall normally enrol for full-time study across two years. There is no provision for accelerated learning.
- (b) A candidate may enrol for part-time study, at the discretion of the Dean of Science, for health, family, employment or other circumstances, in which case the candidate must complete the degree in four calendar years.

6.1 Award

A candidate may earn the award of MSLP (Distinction) for a GPA of 7 to 9 (A- to A+) or a MSLP (Merit) for a GPA of 6 (B+).

Schedule to the Regulations for the Degree of Master of Speech and Language Pathology

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

The following information outlines the core requirements. For in-depth course information please refer to the Course Catalogue section of the Calendar or on the University of Canterbury website.

		2015		
CMDS 661	Clinical Linguistics and Language Acquisition	0.1250	S1	P: Entry subject to approval by the Head of Department R: CMDS 221, CMDS 231
CMDS 662	Fluency Disorders	0.1250	S1	P: Entry subject to approval by the Head of Department R: (1) CMDS 351, (2) CMDS 451
CMDS 663	Audiologic Assessment & Management	0.1250	S1	P: Entry subject to approval by the Head of Department R: CMDS 243, CMDS 242, CMDS 442
CMDS 664	Professional Studies & Clinical Practice	0.1250	S1	P: Entry subject to approval by the Head of Department R: CMDS 281, CMDS 368
CMDS 665	Speech & Language Disorders in Children	0.1250	S2	P: CMDS 661. Entry subject to approval by the Head of Department R: CMDS 222, CMDS 232
CMDS 666	Voice Disorders	0.1250	S2	P: Entry subject to approval by the Head of Department R: CMDS 367
CMDS 667	Neuroscience of Communication & Swallowing	0.1250	S2	P: Entry subject to approval by the Head of Department R: (1) CMDS 162, (2) CMDS 262
CMDS 668	Evidence Based Clinical Practice 2	0.1250	S2	P: (1) STAT 101 or equivalent (2) CMDS 664. Entry subject to approval by the Head of Department R: CMDS 282, CMDS 263 and CMDS 462

		2015		
CMDS 669	Dysphagia & Related Disorders - Diagnosis	0.1250	NO	P: CMDS 667. Entry subject to approval by the Head of Department R: CMDS 365

(A)

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See also General Course and Examination Regulations.

1.

Every candidate for the Postgraduate Diploma in Antarctic Studies, before enrolling for the diploma, shall have

- (a) qualified for the Postgraduate Certificate in Antarctic Studies; or

Schedule to the Regulation for the Postgraduate Diploma in



Schedule to the Regulations for the Postgraduate Diploma in Clinical Psychology

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

Year 1: 0.6 EFTS

		2015	
PSYC 641	Advanced Psychopathology	0.2500	P: Subject to approval of the Head of Department.
PSYC 642	Psychometric Assessment of IQ and Personality Disorders (0.2500)	0.2500	P: Subject to approval of the Head of Department.

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3. **Requirements for admission**
- (a) All students admitted to the Postgraduate Diploma in Geographic Information Science will complete a coherent programme of study approved by the Director: GIS.
 - (b) The requirements for the Postgraduate Diploma in Geographic Information Science shall be GISC 401, GISC 402, GISC 403, and GISC 404, and at least another four 400-level courses (two of which must be GISC courses) listed in the University of Canterbury Calendar and other university calendars relevant to a coherent programme of study for each student that is approved by the Director: GIS. The total course weight for the Postgraduate Diploma in Geographic Information Science will be at least 1.00 EFTS.
 - (c) At the discretion of the Director: GIS, an approved course of study may include up to a total of 0.25 EFTS in 400-level courses or higher from another New Zealand institution.
 - (d) Candidates must satisfy the Director: GIS that they have the necessary prerequisite knowledge to undertake the proposed courses from the Schedule.

4. **Award of Distinction or Merit**

The Postgraduate Diploma in Geographic Information Science may be awarded with Distinction or Merit.

Note: The award of Distinction indicates a grade average in the range A+ to A-; the award of Merit indicates a grade average of B+.

5. **Enrolment**

A candidate may be enrolled for full-time or part-time study. A part-time candidate is one who, because of employment, health, family or other reasons, is unable to do either his or her full-time study. Part-time enrolment requires the approval of

the Dean of Science.

6. **Full-time study**

- (a) A full-time candidate shall normally follow a course of study for not less than one year and not more than two years of study. Extension requires the approval of the Dean of Science.
- (b) A part-time candidate shall be required to follow a programme of study with time limits determined by the Dean of Science on the recommendation of the Director: GIS. Normally, the maximum period for part-time study is four years.

7. **Failed courses**

- (a) A candidate who fails any of the courses offered will require the permission of the Dean of Science and the approval of the Director: GIS to repeat those failed courses or offer any other course in its place.
- (b) A candidate who fails any courses offered and is not successful under Regulation 7(a) shall not be awarded the Postgraduate Diploma in Geographic Information Science, but will be awarded a Certificate of Proficiency for each course passed at the University of Canterbury.

8. **Transfer of courses**

If the courses passed for the Postgraduate Diploma in Geographic Information Science satisfy the requirements for Part 1 of the Master of Geographic Information Science and if the candidate meets the standard required by the Director: GIS (normally a B grade or a grade or better) then, with the approval of the Dean of Science and provision on the availability of suitable supervision, a candidate may elect:

- (a) to have either courses transferred to the degree of Master of Geographic Information Science in lieu of being awarded the Diploma; or
- (b) to enter the degree of Master of Geographic Information Science under Master's Regulation 1(a) i.

Schedule to the Regulations for the Postgraduate Diploma in Geographic Information Science

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

1. **Required courses**

All of the following four courses:

- (a) GISC 401 Foundations of Geographic Information Science (0.125 EFTS)
- (b) GISC 402 Geographic Information Science Research (0.125 EFTS)

- (c) GISC 403 Cartography and Geovisualisation (0.125 EFTS)
- (d) GISC 404 Geospatial Analysis (0.125 EFTS)

2. **Elective A**

At least one of the following courses:

- (a) GISC 405 GIS Programming and Databases (0.125

EFTS)

(b)



P: 60 points in 300-level PHYS courses approved by the Head of Department.

~~Y~~ ~~Y~~ ~~Y~~ ~~Y~~ *

*Subject to UNZ CUAP approval due December 2014.

Four courses. BIOL 405 and three courses are to be selected, with the approval of the School of Biological Sciences Fourth Year Coordinator, from BIOL 430-432, BIOL 434-436, BIOL 471-474, BIOL 478, BIOL 479, BIOL 491-493.

P:

Economics (0.167 EFTS)

- (h) ERST 621 (LU) Principles of Environmental Impact Assessment (20 points)
- (i) ERST 632 (LU) Economics in Environmental Policy (20 points)

A list of additional 400-level courses (or higher), which are highly recommended for students with the suitable prerequisites, will be made available by the Waterways Centre for Freshwater Management. Final course approval will be required from the Director of the Waterways Centre.