## Faculty of Science

### The Degree of Bachelor of Science (BSc)

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#### 1. Requirements of the Degree Course

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. Structure of the Degree

To gualify for the Degree of Bachelor of Science:

- (a) a candidate must pass courses having a minimum total value of 360 points.
- (b) at least 255 points of the 360 must be from the Schedule to the Regulations for the Bachelor of Science.
- (c) 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.
- (d) at least 225 points must be for courses above 100-level.
- (e) at least 90 points must be for courses at 300-level.
- (f) 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. Subject Majors and Endorsements of the Degree

- (a) Subject Majors: the degree of Bachelor of Science may be awarded in the following subjects: Astronomy; Biochemistry; Biological Sciences; Chemistry; Computer Science; Economics; Finance; Geography; Geology; Linguistics; Management Science; Mathematics; Philosophy; Physics; Psychology; Statistics.
- (b) In additional to meeting the requirements of a subject major, the degree of Bachelor of Science may be endorsed in the following subject/s: i. Discourting
  - i. Biosecurity

- ii. Biotechnology
- iii. Ecology
- iv. Environmental Science.

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#### 4. Workload

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.

#### 5. Direct Entry into 200-level Courses

Subject to the approval of the Dean of Science, a student who has achieved a su cient 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 Pcat

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## 7. Cross Credits between BE(Hons) and BSc Degrees

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-level 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-level 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-level 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 BSc under this cross credit regulation.

## 8. Course for BSc after Completion of BE(Hons) Degree

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. Restrictions and Prerequisites from Engineering Courses

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.

## 10. Cross Credits and Substitution between BSc and BForSc Degrees

(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-level 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-level 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-level course equivalent to 15 points or a 300-level 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 BSc under this cross credit regulation.

#### 11. Credit for Other Tertiary Level or Non-University Courses

(a) The Academic Board may grant credit towards the degree from any other tertiary qualification where the content and standard of such study

#### 12. Credit for Polytechnic Nursing Qualifications

A candidate who has completed a Polytechnic Nursing course may be credited with up to 75 points at 100-level under Regulation 2(c)

#### 13. Transition Rules for Students Enrolled for the Degree of Bachelor of Science prior to 10 December 2010

(a) To qualify for the degree of Bachelor of Science:

- a candidate who enrolled for the first time before 10 December 2010 must pass courses having a minimum total value of 357 points;
- at least 254 points must be from the Schedule to the Regulations for the Degree of Bachelor of Science;
- iii. at least 215 points must be above 100-level;
- iv. at least 84 points must be for courses at 300-level;
- v. at least 56 points of that 84 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.

(b) A student whose course of study does not meet the above requirements and who can demonstrate that he/she has been disadvantaged by the introduction of 15 point courses may present a case to the Dean of Faculty for consideration.

# 14. Transition for Students who Enrolled in the Environmental Science Endorsement Prior to October 2011

To qualify for the endorsement in Environmental Science a student who enrolled prior to October 2011 must meet the requirements of either the 2011 endorsement or the 2012 onwards endorsement. To graduate under the 2011 requirements the endorsement must be completed by 31 December 2014.

### Schedule A to the Regulations for the Degree of Bachelor of Science

#### Astronomy

#### 100-level

Strongly recommended: ASTR112, PHYS 101, PHYS 102, MATH 102, MATH 103, and (MATH 170 or COSC 121). PHYS 101 is o ered in Semesters 1 and 2 and PHYS 102 is o ered in Semester 2 and as a Summer Programme.

#### 200-level

Required: (ASTR 211 or ASTR 212); (PHYS 204 and PHYS 285) or (PHYS 281 and PHYS 282); and 30 points from PHYS 201-203 or 22 points from PHYS 221-224; and MATH 201 and 15 further points of 200-level MATH or 22 points from MATH 251-264. Recommended: PHYS 201-203 and MATH 202-203.

#### 300-level

Required: ASTR 381; 15 points selected from ASTR 301-379; 15 points selected from PHYS 301-379; and a further 15 points from ASTR 301-379, PHYS 301-379, ELEC 322-323. If PHYS 204 not taken, PHYS 310 must be included. In any Astronomy course that involves assessed laboratory or tutorial work, satisfactory attendance and perfor-

mance in such work is required Required for postgraduate: Students intending to proceed to BSc(Hons) or MSc should take PHYS 311 and PHYS 312 and two courses from 300-level MATH. Students interested in theoretical physics courses should take PHYS 326. For detailed requirements refer to the BSc(Hons) or MSc entries in the Postgraduate section.

#### Biochemistry

#### 100-level

Required: BIOL 111 and CHEM 112 or (CHEM 114 and 115)

Recommended: BIOL 112, BIOL 113 and (CHEM 111 or CHEM 113 or CHEM 121)

#### 200-level

Required: BCHM 202 (BIOL 231), BCHM 221, BCHM 222, BCHM 281 (CHEM 281), BCHM 212 (CHEM 212) or CHEM 232; and at least one of BCHM 206 (CHEM 242) or BCHM 253 (BIOL 253) Recommended: BCHM 206 (CHEM 242) and BCHM 253 (BIOL 253)

#### Economics

Students who have not been credited with the MATH or STAT prerequisite courses shown in the Course Catalogue may be admitted to courses if they have reached a standard satisfactory to the Head of Department in the prerequisites of other approved courses. Refer to the Economics Department for further information.

100-level

PHIL 220, PHIL 243, PHIL 249. Students intending to take HAPS courses should seek advice from the Philosophy Programme Coordinator.

#### Linguistics

#### Major

Students intending to complete the BSc with a major in Linguistics must be credited with at least 135 points in Linguistics, which must include the following:

#### 100-level

Required: LING 101 and LING 102.

#### 200-level

Required: LING 215, LING 216 and LING 217.

300-level

15 further points of 200-level MATH or 22 points from MATH 251–264

#### 300-level

Required: PHYS 381; 30 points from PHYS 301-322, PHYS 326-379; and 15 points selected from PHYS 301-379. ASTR 301-379 and ELEC 322-323. If PHYS 204 is not taken, PHYS 310 must be included. Note: A student who has taken PHYS 310 may be permitted by the HOD to obtain a double major in Physics and Mathematics without PHYS 381. In any Physics course that involves assessed laboratory or tutorial work, satisfactory attendance and performance in such work is required. Required for postgraduate: Students intending to proceed to BSc(Hons) or MSc should take PHYS 311 and PHYS 312 and two courses from 300-level MATH. Students interested in theoretical or mathematical physics should take PHYS 326. For detailed requirements for Physics and Mathematical Physics, refer to the BSc(Hons) or MSc entries in the Postgraduate section.

#### Psychology

#### 100-level

Required: PSYC 105 and PSYC 106.

#### 200-level

Required: PSYC 206, and three 15 point courses from PSYC 207-212.

Note: Students who enrolled prior to 2010 may be permitted to major with one course from PSYC 207-212, in which case they will be required to pass a further 200-level or 300-level course to complete the major.

#### 300-level

Required: At least 75 points of 300-level PSYC. Note: With the permission of the HOD, a student may substitute a 300-level course for one of PSYC 207-212.

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- ASTR 212 Dynamical Astronomy and the Solar System ASTR 322 Theoretical and Observational Cosmology
- ASTR 322 Stellar Structure and Evolution
- ASTR 324 Special Topic
- ASTR 325 The Structure and Evolution of Galaxies
- ASTR 326 Special Topic
- ASTR 381 Advanced Experiments in Physics and Astronomy
- ASTR 391 Introductory Astronomy Research

#### Biochemistry

Course Code	Course Title
BCHM 202	Molecular Genetics
BCHM 206	Organic Chemistry
BCHM 207	Special Topic
BCHM 212	Chemical Reactivity
BCHM 221	BIOCHEMISTRY A - Biomolecules and their interactions
BCHM 222	BIOCHEMISTRY B - Metabolism; the reactions of molecules in cells
BCHM 253	Cell Biology I
BCHM 281	Practical Biochemistry
BCHM 301	Biochemistry 3
BCHM 302	Biological Chemistry
BCHM 303	Special Topic
BCHM 304	Special Topic
BCHM 381	Biochemical Techniques

#### **Biological Sciences**

Course Code	Course Title
BIOL 111	Cellular Biology and Biochemistry
BIOL 112	Ecology, Evolution and Conservation
BIOL 113	Diversity of Life
BIOL 116	Human Biology
BIOL 203	Introduction to Forensic Biology
BIOL 209	Introduction to Biological Data Analysis
BIOL 210	Vertebrate Biology
BIOL 211	Insect Biology
BIOL 212	Marine Biology and Ecology
BIOL 213	Microbiology and Genetics
BIOL 215	Plant Diversity and Systematics
BIOL 231	Foundations in Molecular Biology
BIOL 250	Principles of Animal Physiology
BIOL 251	Exercise and Health
BIOL 253	Cell Biology I

BIOL 254	Plant Developmental Biology
BIOL 255	Plant Ecophysiology
BIOL 270	Ecology
BIOL 271	Evolution
BIOL 272	Principles of Animal Behaviour
BIOL 273	New Zealand Biodiversity and Biosecurity
BIOL 304	Special Topic
BIOL 305	Practical Field Botany
BIOL 306	Special Topic
BIOL 307	Special Topic
BIOL 308	Special Topic
BIOL 309	Experimental Design and Data Analysis for Biologists
BIOL 313	Advanced Microbiology
BIOL 330	Advanced Concepts in Genetics
BIOL 331	Biochemistry 3
BIOL 332	Genetics and Evolution of Invasive Species
BIOL 351	Cell Biology 2
BIOL 352	Plant Development and Biotechnology
BIOL 354	Animal Ecophysiology
BIOL 355	Neurons, Hormones and Behaviour
BIOL 371	Evolutionary Ecology
BIOL 373	Behavioural Ecology
BIOL 374	Marine Ecosystems
BIOL 375	Freshwater Ecosystems
BIOL 377	Global Change and Biosecurity
BIOL 378	Population Ecology and Conservation
BIOL 379	Sustaining Native Biodiversity in Primary Production Systems

#### Biosecurity

Course Code	Course Title
BIOS 201	Issues in New Zealand Biosecurity

#### Chemistry

Course Code	Course Title
CHEM 111	General Chemistry A
CHEM 112	General Chemistry B
CHEM 114	Introductory Chemistry
CHEM 211	Molecules
CHEM 212	Chemical Reactivity
CHEM 241	Inorganic Chemistry
CHEM 242	Organic Chemistry
CHEM 243	Physical Chemistry
CHEM 281	Practical Chemistry

- CHEM 282 Measurement and Analysis
- CHEM 321 Inorganic and Structural Chemistry
- CHEM 322 Organic Chemistry
- CHEM 324 Analytical and Environmental Chemistry
- CHEM 325 Biological Chemistry
- CHEM 327 Special Topic
- CHEM 328 Special Topic
- CHEM 333 General Physical Chemistry
- CHEM 343 Applied Physical Chemistry
- CHEM 361 Inorganic and Structural Chemistry (Pre-Honours)
- CHEM 362 Organic Chemistry (Pre-Honours)
- CHEM 373 Chemical Physics (Pre-Honours)
- CHEM 381 Advanced Synthetic Techniques
- CHEM 382 Instrumental Methods

ECON 336 Public Choice

ECON 337 Economic Evaluation in Health

ECON 338

GEOL 331	Principles of Basin Analysis
GEOL 334	Tectonics and the New Zealand continent
GEOL 336	Magmatic Systems and Volcanology
GEOL 337	Exploration and Mining Geology
GEOL 338	Engineering and Environmental Geology
GEOL 339	Special Topic
GEOL 340	Special Topic
GEOL 342	Special Topic
GEOL 343	Special Topic
GEOL 351	Advanced Field Techniques
GEOL 352	Advanced Field Mapping
GEOL 353	Past Climates and Glaciations
GEOL 354	Geodynamics and Geohazards
GEOL 355	Water and Geothermal Systems
GEOL 356	Field-focused Research Methods

#### Health Sciences

Course Code	Course Title
HLTH 101	Introduction to Health Studies
HLTH 201	Health Promotion
HLTH 301	Evidence in Health

#### History and Philosophy of Science

Course Code	Course Title
HAPS 110	Science: Good, Bad, and Bogus
HAPS 210	History of Science
HAPS 310	Philosophy of Science

#### Linguistics

Course Code	Course Title
LING 101	The English Language
LING 102	Language and Society
LING 215	Articulatory and Acoustic Phonetics
LING 216	Phonology and Morphology
LING 217	Syntax
LING 218	Formal Semantics
LING 219	Language Acquisition
LING 220	The History of English
LING 304	Historical Linguistics
LING 306	Topics in Syntactic Theory
LING 307	Topics in Phonetics and Phonology
LING 308	Word Meaning
LING 309	Topics in Morphology and Word Formation
LING 310	Variationist Sociolinguistics

### Management Science

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Course Code	Course Title
MSCI 101	Management Science
MSCI 110	Quantitative Methods for Business
MSCI 201	Planning Methods for Management
MSCI 202	Business Forecasting and Simulation
MSCI 203	Optimisation for Business
MSCI 270	Introduction to Operations and Supply Chain Management
MSCI 271	Operations Management Processes
MSCI 280	Statistical Methods for Management
MSCI 301	Optimisation Models and Methods
MSCI 302	Probabilistic Operations Research Models
MSCI 340	Special Topic
MSCI 370	Strategic Operations and Supply Chain Management
MSCI 371	Materials, Logistics and Supply Chain Management
MSCI 372	Project Management
MSCI 373	Quality Management

#### Mathematics

Course Code	Course Title
MATH 101	Methods of Mathematics
MATH 102	Mathematics 1A
MATH 103	Mathematics 1B
MATH 120	Discrete Mathematics
MATH 130	Introduction to Logic & Computability
MATH 170	Mathematical Modelling and Computation
MATH 199	AIMS - Advancing in Mathematical Sciences
MATH 201	Mathematics 2
MATH 202	Di erential Equations and Vector Calculus
MATH 203	Linear Algebra
MATH 220	Discrete Mathematics and Cryptography
MATH 230	Logic, Automata, and Computability
MATH 240	Analysis and Groups
MATH 270	Mathematical Modelling and Computation 2
MATH 280	Introduction to Scientific Computation
MATH 302	Partial Di erential Equations
MATH 303	Applied Matrix Algebra
MATH 320	Discrete Mathematics and Coding Theory
MATH 321	Rings and Fields
MATH 324	Cryptography and Coding Theory
MATH 335	Computability Theory
MATH 336	Foundations of Mathematics

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PSYC 336

Total 200-level points required: 105 points

#### 300-level

BIOL 332 Invasive Systems: Genetics (15 points) and

BIOL 377 Global Change and Biosecurity (30 points)

Total 300-level points required: 45 points

#### Recommended courses

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

#### 100-level

LAWS 101 The Legal System SCIM 101 Science, Maori and Indigenous Knowledge

#### 200-level

BIOL 203 Introduction to Forensic Biology BIOL 232 Genetics (up to 2009) BIOL 213 Microbiology and Genetics BIOL 252 Plant Organisation and Physiology (up to 2009) BIOL255 Plant Ecophysiology CHEM 224 Analytical and Environmental Chemistry

ANTA 201 Antarctica and Global Change POLS 206 Public Policy: An Introduction

#### 300-level

BIOL 303 Forensic Genetics

BIOL 330 Advanced Concepts in Genetics

BIOL 313 Advanced Microbiology

BIOL 352 Plant Development & Biotechnology BIOL 309 Experimental Design and Data Analysis for Biologists

#### 100-level

LAWS 101 The Legal System

SCIM 101 Science, Maori and Indigenous Knowledge

#### 200-level

BIOL 211 Insect Biology BIOL 212 Marine Biology BIOL 215 Plant Diversity and Systematics BIOL 214 Diversity of Algae (up to 2009) FORE 218 Forest Biology ANTA 201 Antarctica and Global Change POLS 206 Public Policy: An Introduction

#### 300-level

BIOL 305 Practical Taxonomy for Field Biologists BIOL 309 Experimental Design and Data Analysis for Biologists BIOL 371 Evolutionary Ecology FORE 443 Biosecurity Risk Management BIOL 374 Marine Ecosystems BIOL 375 Freshwater Ecosystems BIOL 378 Population Ecology and Conservation BIOL 379 Sustaining Native Biodiversity in Primary Production Systems

#### Biotechnology

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

#### **Required courses**

The following courses are required for the endorsement:

100-level (all 15 points)

BIOL 111 Cellular Biology and Biochemistry BIOL 112 Ecology, Evolution and Conservation BIOL 113 Diversity of Life CHEM 112 General Chemistry B or CHEM 115 Total 100-level required points: 60 points

#### 200-level (all 15 points)

BIOL 209 Introduction to Biological Data Analysis BIOL 213 Microbiology and Genetics BIOL 231 Foundations in Molecular Biology or BCHM 202 Molecular Genetics BIOL 271 Evolution BIOL 253 Cell Biology 1 or BIOL 254 Plant Developmental Biology Total 200-level required points: 75 points

#### 300-level

BIOL 352 Plant Development and Biotechnology (30 points) or BIOL 313 Advanced Microbiology (30 points) BIOL 330 Advanced Concepts in Genetics (30 points) BIOL 332 Genetics and Evolution of Invasive Species (15 points) BIOL 351 Cell Biology (30 points) BIOL 371 Evolutionary Ecology (15 points) Total 300-level required points: 60 points

#### **Recommended courses**

#### Ecology

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.

#### **Required courses**

The following courses are required for the endorsement:

#### 100-level

BIOL 111 Cellular Biology and Biochemistry BIOL 112 Ecology, Evolution and Conservation BIOL 113 Diversity of Life

#### 200-level

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

#### 300-level

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
BIOL 375 Freshwater Ecosystems

representatives. Relevant work or volunteer experience with individuals who have communication disorders may also be considered when entry decisions are made.

- (g) 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 second week of December following the publication of grades.
- (h) Exemption from the Intermediate Year may be granted to individuals with qualifications and, where appropriate, relevant work experience, approved by the Head of Department. Students admitted under this clause may be required to take additional qualifying courses.

#### 4. Maintaining a Place in the Programme

Students admitted to the degree must pre-register for the practicum courses CMDS 381, CMDS 382, 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 except under exceptional circumstances and by the approval of the Dean of Science.

## 5. Each Professional Examination to be Passed as a Whole

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 exceptional 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. Approval of 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 Disorders.

#### 7. BSLP(Hons) with Honours

The Degree of Bachelor of Speech and Language Pathology with Honours may be awarded with or without Honours. A candidate who has fulfilled the requirements herein prescribed for the degree and whose work has been of a su ciently high standard may be recommended by the Dean of Science for admission to the degree with First or Second Class Honours. The candidates obtaining Second Class Honours shall be listed in two divisions (Division 1 and Division 2).

### Schedule to the Regulations for the Degree of Bachelor of Speech and Language Pathology with Honours

HLTH 101	Introduction to Health Studies			
MAOR 107	Aotearoa: Introduction to Traditional Maori Society			
MAOR 108	Aotearoa: Introduction to New Zealand Treaty Society			
PSYC 105	Introductory Psychology - Brain, Behaviour and Cognition			
PSYC 106	Introductory Psychology - Social, Personality and Developmental			
SCIM 101	Science, Maori and Indigenous Knowledge			
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### Certificate in Science (CertSc)

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#### 1. The Structure of the Programme

(a) Subjects: The Certificate in Science may be awarded for courses passed in the following subjects: Astronomy, Biochemistry, Biological Sciences, Chemistry, Computer Science, Economics, Finance, Geography, Geology, Linguistics, Management Science, Mathematics, Philosophy, Physics, Psychology, and Statistics.

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(b) Structure: To qualify for the Certificate in Science a candidate must pass courses totalling at least 75 points at the 100- and/or 200-level, in courses listed in the Schedule to the Bachelor of Science.

## 2. Full-time and Part-time Study and the Normal Time Limits

The Certificate may be studied full-time or part-time. Other than in exceptional circumstances approved by the Dean of Science, the maximum elapsed time from first enrolment will be three years.

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The Certificate in Science is an introductory qualification in Science for candidates wishing to: test their scholastic ability at university prior to proceeding to a Bachelor's degree programme; broaden or update their knowledge for employment reasons, or: engage in lifelong learning.

## 3. Standard of Entry and Approvals Required for Admission to the Programme

- (a) Candidates must satisfy the admission requirements of the University.
- (b) The programme of study must be approved by the Dean of Science.

#### 4. Transfer of Earlier Credit

- (a) With the approval of the Dean of Science, courses passed within the previous five years and listed in the Schedule to the Bachelor of Science, or courses deemed to be equivalent which have not already been credited to another qualification, may be credited to the Certificate, provided that they satisfy the other regulations of the Certificate. Up to 15 points from courses from another New Zealand university may be credited under this Regulation.
- (b) A student who has abandoned a Bachelor of Science degree and has passed 75 points with a C average or better and wishes to graduate with a Certificate in Science, must have permission of the Dean of Science to do so.

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#### 5. With the approval of the Dean of Science:

- (a) A candidate who has been awarded a Certificate within the previous five years may apply to credit Certificate courses towards an undergraduate science degree of the University, provided any such courses comply with the Regulations for the degree.
- (b) A candidate who has not been awarded the Certificate may apply to transfer courses passed while enrolled for the Certificate to a Bachelor of Science degree.

## Graduate Certificate in Science Innovation and Entrepreneurship (GradCertScIE)

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## 1. Qualifications required to enrol in the Certificate

Every candidate for the Graduate Certificate in Science Innovation and Entrepreneurship shall have: (a) either

- i. qualified for the award of any appropriate degree in New Zealand; or
- ii. been admitted ad eundem statum as entitled to enrol for the Graduate Certificate; and

(b) been approved as a candidate for the Graduate Certificate by the Dean of Science.

#### 2. Structure of the Graduate Certificate

To qualify for the Graduate Certificate in Science Innovation and Entrepreneurship a candidate must pass courses totalling at least 0.5000 EFTS/60 points at 300-level, in courses listed in the Schedule to these regulations. Up to 0.2500 EFTS/30 points may be credited from courses o ered by Lincoln University as listed on the degree Schedule, or the schedule for another degree as approved by the Dean of Science.

#### Approval of Course of Study

The personal course of study of a candidate shall be approved by the Dean of Science, or nominee.

#### 4. Part-time Enrolment

The Certificate may be studied part-time, and will normally be completed within three years of enrolment in the qualification.

#### 5. Repeating of Courses

A candidate may repeat one failed course for the Certificate subject to the approval of the Dean of Science

#### 6. Award of the Certificate with Distinction

The Graduate Certificate in Science Innovation and Entrepreneurship may be awarded with Distinction.

### Schedule to the Regulations for the Graduate Certificate in Science Innovation and Entrepreneurship

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#### University of Canterbury courses

- (a) SCIE 301 Science and Entrepreneurship in New Zealand Part 1
- (b) SCIE 302 Science and Entrepreneurship in New Zealand Part 2

#### Lincoln University courses

Awarded

(a) SCIE 399 Research Essay (unblocked)

#### University of Canterbury courses

- (a) MGMT 301 Managing Change
- (b) MGMT 304 Diversity in Organisations
- (c) MGMT 324 International Entrepreneurship
- (d) MGMT 332 International Management

#### Lincoln University courses

- (a) SCIE 398 Research Essay (unblocked)
- (b) BMGT 310 Business Plan

## Graduate Diploma in Science (GradDipSc)

1. ch , c, c, l, c 1. Subjects in Which the Diploma May be

The subjects for the Graduate Diploma in Science are: Astronomy, Biochemistry, Biological Sciences, Chemistry, Computer Science, Economics, Ethics, Finance, Geography, Geology, Linguistics, Management Science, Mathematics, Philosophy, Physics, Psychology, and Statistics.

#### Qualifications Required to Enrol in the Diploma

- (a) Every candidate for the Diploma in Science shall, before enrolling for the diploma, fulfil one of the following conditions:
  - either qualify for a bachelor's degree; i.
  - ii. or be admitted ad eundem statum as entitled to enrol for the Diploma in Science.
- (b) Every candidate for the diploma shall have been approved as a candidate by the Dean of Science.

#### 3. Structure of the Diploma

To qualify for the diploma a candidate shall pass prescribed courses which shall have been selected from the Schedule to the Bachelor of Science degree or from courses which the Academic Board has accepted as equivalent thereto. These courses must have a total value of not fewer than 120 points including not fewer than 90 points at 300-level.

#### 4. Award of Diploma with Distinction

The Diploma in Science may be awarded with Distinction.

#### 5. Exemption of Prerequisites

Normal prerequisites for any course may be exempted at the discretion of the Head of Department/School where the course is o ered.

#### 6. Part-time Enrolment

The diploma may be studied part-time.

#### 7. Repeating of Courses

A candidate who has failed one or more courses is allowed to repeat those courses for credit.

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Faculty of Science

#### Finance and Mathematics

Either:

- (a) FINC 680 plus eight additional courses selected from 600-level FINC or 400-level MATH, including at least three courses in FINC and at least four courses in MATH; or
- (b) MATH 449 plus eight additional courses selected from 600-level FINC or 400-level MATH, including at least four courses in FINC and at least three courses in MATH.
- Р.
- Candidates must have met the majoring requirements for the BSc in Mathematics and passed FINC 201, FINC 203, FINC 205 and FINC 331; and at least 30 additional points from 300-level FINC courses; or
- (2) Candidates must have met the majoring requirements for the BCom or BSc in Finance and passed or45 points from MATH 201, MATH 202, MATH 203, MATH 270; and at least 45 additional points from MATH 301–394.

#### **Finance and Statistics**

Either:

- (a) FINC 680 plus eight additional courses in 600-level FINC or 400-level STAT, including at least three courses in FINC and at least four courses in STAT; or
- (b) STAT 449 plus eight additional courses in 600-level FINC or 400-level STAT, including at least four courses in FINC and at least three courses in STAT.
- Р.
- Candidates must have met the majoring requirements for the BSc in Statistics and passed FINC 201, FINC 203, FINC 205, and FINC 331; and at least 30 additional points from 300-level FINC courses; or
- (2) Candidates must have met the majoring requirements for the BCom or BSc in Finance and passed 45 points from STAT 201–294; and at least 45 additional points from STAT 301–394.

#### Geography

A Research Project (GEOG 420) and a further 1.0 EFTS or 120 points from GEOG 401–419 and GISC 403–413, with the approval of the Head of Department. Note: Not all courses will be o ered in any one year.

- P: Students will normally be expected to 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 Geography courses); or

#### The Degree of Bachelor of Science With Honours (BSc(Hons))

(2) to have completed 112–120 points at 300-level

#### Management Science

MSCI 680 and a further 120 points (or equivalent) chosen from MSCI 601–679 with approval of the Head of the Department of Management. Up to 30 points (or equivalent) may be replaced by other graduate courses with approval of the Head of the Department of Management.

P:

At least 84 points at 300-level, normally including:

- (1) MSCI 301 or (MSCI 315 and 316);
- (2) MSCI 302 or (MSCI 310 and 311);
- (3) 28 points at 300-level in MSCI, MATH, STAT or COSC courses as approved by the Head of Department of Management;
- (4) (MSCI 201 and MSCI 202) or MSCI 204;
- (5) MSCI 203 or MSCI 216;
- (6) MSCI 210 or MSCI 280;
- (7) MSCI 101;
- (8) MATH 102 or 103;
- (9) STAT 101.

#### Mathematics

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

- 45 points from MATH 201, MATH 202, MATH 203, MATH 220 and MATH 240, including MATH201 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.

#### Mathematics and Philosophy

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.

#### Р.

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

#### 308, MATH 309, MATH 336.

#### Mathematical Physics

PHYS 407 and MAPH 480 and seven courses chosen from PHYS 401–460 and MATH 401–490 (other than MATH 449). Normally at least four courses must be chosen from the PHYS course list and at least two from the MATH course list. A maximum of two courses from PHYS 441–460. Not all courses may be available in any one year. Note: The choice of courses is subject to the approval of the Coordinator, Mathematical Physics. P

- (1) PHYS 201-204; and
- (2) MATH 201–203; and
- (3) 60 points PHYS 300-level and 60 points MATH 300-level courses chosen with the approval of the Co-ordinator, Mathematical Physics. Note: Students will normally be expected to take PHYS 311, PHYS 312, PHYS 326; and 60 points from MATH 322, 342, 343, 361, 363, 371.

#### Medical Physics

MDPH 407, MDPH 480 and six courses from MDPH 401–410 and one course from PHYS 410–460. With the approval of the Programme Director, one or two of the courses may be replaced by appropriate courses from another subject.

P: 90 points at 300-level, approved by the Programme Director.

#### Microbiology

Four courses and a research project (MBIO 480). The courses are BIOL 492 and BIOL 493 plus a further two courses selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

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- (1) BIOL 313; and
- (2) One course selected from BIOL 331, BCHM 301, BIOL 330.

L, 309.

#### Physics

PHYS 407, PHYS 480 and seven courses chosenC ()Tj2m6Snd MAPH 48

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

#### Plant Biology

Four courses and a research project (PBIO 480).

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.

### The Degree of Master of Antarctic Studies (MAntaStud)

1. Qualifications Required to Enrol in the Degree

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 1u1nee aC84(c))]J/Spankdvgrf 1u1nd(5 0.01 IT\*(the Mast)14acat)1 ansye: the Mast
- (c) proverside the second of the second o

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.

(e) A candidate who passes all of the courses for Part I, but who does not attain a B grade average 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

## Schedule to the Regulations for the Degree of

The Degree of Master of Audiology (MAud)

courses to obtain a B grade average. (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 Antarctic Studies.

#### 7. Requirements for Part II

- -

EFTS)

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.

ANTA 690 Antarctic Studies Masters Thesis (1.000

## Master of Antarctic Studies

1. 1 (a) courses listed in the schedule for the award of the Postgraduate Certificate in Antarctic Studies:

(b) other 400-level courses relevant to a coherent programme of study.

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

### The Degree of Master of Audiology (MAud)

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### Degree

(a) Either:

- i. gualified for the award of the Degree of Bachelor of Speech and Language Pathology with Honours: or
- ii. gualified 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 course work, as approved by the Head of the Department of Communication Disorders: or
- iii. been admitted ad eundem statum as entitled to enrol for the degree of Master of Audiology; and
- (b) been approved as a candidate for the degree by the Dean of Science.

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#### 2. Full-time and Part-time Study

A candidate shall normally be enrolled as a fulltime candidate. A full-time candidate is one who throughout the calendar year regards study and research for the Master of Audiology as a full-time occupation.

With the approval of the Dean of Science, a candidate may be enrolled as a part-time candidate. 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. Total course weighting for the MAud is 2.00 EFTS for students with a BSLP(Hons) and 2.21 EFTS for those without a BSLP(Hons) degree.

#### 3. Structure of the Degree

A candidate for the Degree of Master of Audiology shall:

(a) enrol in and pursue either full-time for 2 years or

Faculty of Science

points/1.00 EFTS must be completed success-

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

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### 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)

#### Group 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)

#### Group B

- At least one of the following courses:
- (a) GISC 410 GIS 2.0 (0.125 EFTS) (O ered 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 ETFS)

## The Degree of Master of Science (MSc)

1. Subjects in Which the Degree May be Awarded; Award of Degree with Distinction or Merit, or Honours

- (a) The subjects for the Degree of Master of Science are those listed in Schedule A to these Regulations.
- (b) The Degree of Master of Science may be awarded with Distinction or Merit provided that the additional requirements of Regulation 14 are met.
- (c) The Degree of Master of Science may be awarded with Honours provided that the additional requirements of Regulation 15 are met.

## 2. Qualifications Required to Enrol in the Degree

- (a) Every candidate for the Degree of Master of Science shall, before enrolling for the degree, fulfil one of the following conditions: either
  - i. qualify for the award of the ordinary Degree of Bachelor of Science; or
  - 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 Science; or

- iii. qualify for the award of the Degree of Bachelor of Science with Honours; or
- iv. qualify for the award of the Degree of Bachelor of Speech and Language Pathology with Honours; or
- v. qualify for the award of a Postgraduate Diploma in Science (Note: Candidates who qualify for a Canterbury PGDipSc are subject to the provisions of PGDipSc Regulation 5); or
- vi. qualify for the award of a Postgraduate Diploma in Engineering Geology (Note: Candidates who qualify for the Canterbury Postgraduate Diploma in Engineering Geology are subject to the provisions of the PGDipEngGeol Regulation 5); or
- vii. qualify for the award of a Postgraduate Diploma in Science (Hazard and Disaster Management (Note: Candidates who qualify for the Canterbury Postgraduate Diploma in

Science (Hazard and Disaster Management) are subject to the provisions of the PGDipSc Regulation 5); or

- viii. be admitted ad eundem statum as entitled to enrol for the degree of Master of Science; or
- ix. for the Master of Science in Biotechnology only, be admitted by any other of the conditions of Regulation 2(a) or qualify for the award of Bachelor of Engineering, with or without Honours.
- (b) Every candidate for the degree shall have been approved as a candidate by the Dean of Science.

a pass in Part I as a whole and shall not be permitted to o er Part II for examination, but he or she will be awarded a Certificate of Proficiency for each course passed.

- iv. A candidate who passes all the courses for Part 1, 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 o er Part II for examination, but may apply for the award of the Postgraduate Diploma in Science or the Postgraduate Diploma in Science or the Postgraduate Diploma in Engineering Geology, whichever is appropriate.
- Notwithstanding anything else in Regulation 7(a), before o ering Part II for examination, a candidate must pass Part I to the standard

and Examination Regulations, Part L.

- (b) A candidate shall not present a thesis any part of which has previously been accepted for any degree.
- (c) The examiners may require the candidate to undergo an oral examination on the subject of the thesis or on related subjects.
- (d) If the thesis at its first presentation is unsatisfactory, the Dean of Science may, on the recommendation of the examiners, permit the candidate to revise the thesis and re-submit it by a specified date.
- (e) If the examiners' final recommendation is that the thesis be awarded a failing grade, the degree of Master of Science shall not be awarded.

#### 14. MSc with Distinction or Merit

Where the candidate has o ered Part II only, by thesis, and in the opinion of the examiners the thesis shows special merit, they shall recommend that the degree be awarded with Distinction or Merit, provided that the thesis is presented within the time limits specified in Schedule B to these Regulations or that for a part-time candidate the thesis is presented within the time limits determined by the Dean of Science under Regulation 6.

#### 15. Award of Honours

Where the candidate has o ered both Parts, the degree may be awarded with Honours.

- (a) There shall be two classes of Honours: First Class Honours and Second Class Honours. Second Class Honours shall be awarded in two divisions: Division 1 and Division 2.
- (b) The weighting of the two Parts in the assessment (including the determination of Honours) is given in Schedule B to these Regulations.
- (c) The requirements of Parts I and II shall normally be completed by a full-time candidate within the time limits specified in Schedule B to these Regulations. The time limits for a part-time

candidate shall be determined by the Dean of Postgraduate Studies under Regulation 6.

- (d) A full-time candidate for the degree in any subject shall be eligible for the award of Honours only if all the requirements for the degree are completed within three years of the date of enrolment as a candidate for Part I of the degree in that subject. The eligibility for Honours of a part-time candidate shall be determined in each case by the Dean of Science.
- (e) In special circumstances the Dean of Science may, on recommendation of the Head of Department/School, extend the period of eligibility for the award of Honours beyond the time limits specified in 15(c), and/or 15(d).

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#### 16. Award of MSc instead of PhD

Where a thesis has been presented for the Degree of Doctor of Philosophy on a subject listed in Schedule A to these regulations, and the examiners are of the opinion that it does not justify the award of that degree, they may recommend the award of the Degree of Master of Science, without Honours or Distinction or Merit.

#### 17. Transfer from MSc to PhD

With the approval of the Dean of Postgraduate Studies, and on the recommendation of the Head of Department/School, a student who has been enrolled for MSc Part II for a period of at least 6 months full-time, or the equivalent part-time period, and who has completed MSc Part I or is o ering only Part II, may apply.

Candidates wishing to do this should refer to PhD Regulation 3(f). A candidate who transfers to PhD, and who completed Part I, may apply for the award of the PGDipSc or PGDipEngGeol, whichever is appropriate.

#### 18. Transfer from MSc to PGDipSc or PGDipEngGeol

A candidate who is enrolled for M.Sc. Part I may at any time apply to the Dean of Science for transfer to either the PGDipSc or PGDipEngGeol, whichever is appropriate. 19.

- Р.
- (2) BIOL 252 or BIOL 254 and BIOL 255; and
- (2) BIOL 352; and
- (3) one course selected from BIOL 313, BIOL 330, BIOL 331.
- L 309.

Faculty of Science

the Co-ordinator. A minimum B grade in relevant 300-level courses is normally required.

#### **Evolutionary Biology**

Part I: Four courses. At least two courses are to be selected from BIOL 421, BIOL 430, BIOL 431, BIOL 470, BIOL 478. The remaining two courses to 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.

- Р.
- (1) BIOL 271; and
- (2) 60 points from 300-level BIOL courses including at least one of BIOL 330, BIOL 332, BIOL 371, BIOL 373; and
- (3) BIOL 309 or equivalent background in statistics.

#### Geography

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 o ered 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:
  - 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 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.

#### Geology

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 the courses credited towards the Postgraduate Diploma in Science.

- P: GEOL 351 and GEOL 352 (or equivalent fieldwork), and an additional 60 points from other GEOL 300-level 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 average).

#### Hazard and Disaster Management

Part I: The programme of study consists of HAZM 401, HAZM 403, ENCI 601, ENCI 462 (or equivalent), and four other courses chosen to form a full-time coherent programme in the area of hazard and disaster management with the approval of the Programme Director, Department of Geological Sciences. Note: Not all courses may be o ered in any one year.

Part II: A thesis (HAZM 690).

- P: Part I:
  - (1) 15 points of 100-level STAT courses or equivalent; and
  - (2) 90 points 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 Head of the Department of Geological Sciences (the normal requirement is at least a B grade average); plus

Part II: Completion of Part I. In order to proceed to Part II, the Head of the Department of Geological Sciences normally requires the student to have attained a B+ grade average or better in Part I. students who fail to meet this requirement, and who are declined entry to Part II by the Head of Department, may o h(in an)10n6(t II by t) /il teand d0(v)ue7.ine

#### History and Philosophy of Science

Part I: Courses from HAPS 401-433/HAPS 480 to total overall 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.

#### Management Science

Part I: 120 points (or equivalent) selected from MSCI 601-680 with approval of the Head of the Department of Management.

Part II: A thesis (MSCI 690).

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

- P: At least 84 points at 300-level, normally including:
  - (1) MSCI 301 or (MSCI 315 and 316);
  - (2) MSCI 302 or (MSCI 310 and 311).

#### Mathematics

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:

- 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.

#### **Medical Physics**

Part I: Seven courses from MDPH 401-410 and one course from PHYS 410-460; one of these courses may be replaced by an appropriate course from another subject, the choice of courses is subject to the approval of the Programme Director.

Part II: A thesis (MDPH 690) which shall normally be presented no later than 12 months after the date t I: 120 points TH 2

#### Philosophy

Part I: Eight courses from PHIL 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 463, 464, 467, 468, 469, 470, 471, 472, 474, 475 (as for Philosophy BA(Hons)).

Part II: a thesis (PHIL 695).

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

P: 60 points in Philosophy at 300-level.

#### Physics

Part I: PHYS 407, PHYS 480 and five courses chosen from PHYS 401-460. At least three courses from PHYS 401-440. Not all courses may be available in any one year. With the approval of the Head of Department, up to two of the 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.

Part II: A thesis (PHYS 690) which shall normally be presented not later than 12 months after the date of enrolment for Part II.

In determining the class of honours, Parts I and II are weighted in the ratio 2:3. Students should consult the MSc Regulations for further requirements.

P: 90 points at 300-level approved by the Head of Department. Note: Students will normally be expected to have taken PHYS 311 and PHYS 312 and those with an interest in theoretical physics papers will normally be expected to have taken PHYS 326.

#### Plant Biology

Part I: Four courses to be selected, with the approval of the School of Biological Sciences Fourth Year Coordinator, from BIOL 421, BIOL 430-432, BIOL 434-436, BIOL 453, BIOL 471-474, BIOL 476, BIOL 478, BIOL 479, BIOL 490-493.

Part II: A thesis (PBIO 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: 90 points from 300-level BIOL courses



#### Psychology

Part I: Courses totalling 120 points (1 EFT) from PSYC 401-474.

Part II:

- (a) PSYC 695 Psychology MSc Thesis
- (b) For students who have not already been credited with PSYC 460 or PSYC 464, PSYC601 Research Methods in Psychology OR PSYC602 Multivariate Statistics & Methods in Psychology must be completed.

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#### Statistics

Part I: Eight courses chosen from STAT 401-490 and MATH 401-490 (other than STAT 449 or MATH 449). Normally one of the eight courses must be STAT 464 if the student has not been credited with STAT 213 or STAT 214 previously. TH 40Normally one of th TofTkisticsAT 464dh be STAT 464

### Time Limits and the Weighting of Parts I and II

Subject	Max. time limit (months) for Part II only if taken alone or sequentially*, and retaining eligibility for Honours or Distinction/ Merit	Max. time limit (months) for Part II only if taken alone or sequentially*, without eligibility for Honours or Distinction/ Merit	Max. time limit (months) for Parts Itime limit for Parts Itime limitc]0.005 5 Tif 13()]istinction/ Distinction/ Merit (months) flimit (months)		
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					-

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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Candidates who enrol in Part II only, to do a thesis, may start at any time, subject to the approval of the Head of Department/School, and for such candidates the time limits given here will be calculated from the actual start date, which must be recorded in the College of Science. Candidates who complete both Parts I and II sequentially may delay the start of Part II, and record a specific start date, but candidates doing this should be aware or Regulation 15(d) which requires completion of both Parts I and II within three years of the commencement of Part I, if eligibility for Honours is to be retained.

 $* \sum_{i=1}^{n} \sum_{i=1}^{n} \left\{ a_{i} + a_{i}$ 

## The Degree of Master of Water Resources Management (MWaterRM)

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## 1. Qualifications Required to Enrol in the Degree

Every candidate for the degree of Master of Water Resource Management, before enrolling for the degree, shall have:

(a) either

- i. qualified for the Postgraduate Diploma in Water Resource Management; or
- ii. qualified for a degree in a New Zealand university which is of relevance to Water Resource Management and the proposed course of study; or
- iii. been admitted ad eundem statum to enrol for the Master of Water Resource Management.
- (b) Presented evidence of ability for advanced level academic study by normally having achieved a B average and above.
- (c) Been approved as a candidate by the Dean of Science.

## 2. Award of the Degree with Honours or Distinction or Merit

The degree of Master of Water Resource Management maybe 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. The ratio of Part I to Part II shall be 1:1. A candidate who o ers Part II by thesis only may be awarded the degree of Master of Water Resource Management with Distinction or Merit.



#### 3. Structure of the Degree

The programme for the degree of Master of Water Resource Management consists of Part I and Part II, 2.00 EFTS/240 points

(a) A candidate admitted under (ii.) and (iii.) of Regulation 1(a)-10() Int1 Tc 0 -1.187 TD(a) oater Resource Management, average and above. 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. Duration of the Programme

A candidate shall complete the degree according to the following timeframe:

- (e) LWST 602 (LU) Advanced Resource Management Law ( 0.167 EFTS)
- (f) ERST 633 (LU) Integrated Environmental Management (0.167 EFTS)
- (g) ECON 606 (LU) Natural Resource and Energy 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)

# Postgraduate Certificate in Antarctic Studies (PGCertAntaStud)

#### 1. Admission Requirements

Every candidate for the Postgraduate Certificate in Antarctic Studies shall have:

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(a) either

- i. qualified for the award of any appropriate degree in New Zealand; or
- be admitted ad eundem statum with graduate status in the University of Canterbury; and
- (b) been approved as a candidate for the Postgraduate Certificate by the Dean of Science; and
- (c) satisfied the medical examination as prescribed by Antarctica New Zealand.

Application for admission to the Postgraduate Certificate programme must be made by 1 August in the year of enrolment in the course.

#### Postgraduate Diploma in Antarctic Studies (PGDipAntaStud)

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

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WATR 690 Water Resources Masters Thesis (120 points /1.000 EFTS)

#### 2. Course of Study

- (a) A candidate who fails any of the courses o ered may not repeat those failed courses or o er any courses in its place. A Certificate of Proficiency for each course passed will be awarded.
- (b) A candidate shall satisfactorily complete the prescribed course of study in one year, comprising ANTA 601 Antarctica: Contemporary Issues and Perspectives Part 1; ANTA 602 Antarctica: Contemporary Issues and Perspectives Part 2; ANTA 603 Antarctica Field Work; ANTA 604 Supervised Project in Antarctic Studies. Participation in the Scott Base component of ANTA 603 is subject to a medical examination as prescribed by Antarctica New Zealand.

#### 3. Award of Certificate with Distinction

The Postgraduate Certificate in Antarctic Studies may be awarded with distinction.

### Postgraduate Diploma in Antarctic Studies (PGDipAntaStud)

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#### 1. Qualifications Required to Enrol in the Diploma

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
- (b) been admitted ad eundum statum to enrol for the Postgraduate Diploma in Antarctic Studies; and
- (c) presented evidence of ability for advanced level academic study by having achieved a B average and above in 300-level courses.
- (d) Every candidate for the degree shall have been approved as a candidate by the Dean of Science

## 2. Award of the Diploma with Distinction or Merit

The Postgraduate Diploma in Antarctic Studies may be awarded with Distinction or Merit.

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#### 3. Structure of the Course

- (a) All students admitted to the Postgraduate Diploma in Antarctic Studies will complete a coherent programme of study approved by the Programme Director.
- (b) The requirements for the Postgraduate Diploma in Antarctic Studies shall be a Postgraduate Certificate in Antarctic Studies 0.5 efts/60 points and other 400-level courses of at least 0.5 efts/60 points, approved by the Programme Director and listed in the University of Canterbury Calendar and other New Zealand University Calendars relevant to a coherent programme of study for each student. The total course weight for the Postgraduate Diploma in Antarctic Studies will be at least 1.00 EFTS.
- (c) Candidates must satisfy the Programme Director, that they have the necessary prerequisite knowledge to undertake the proposed courses from the Schedule.

#### 4. Full-time/Part-time Enrolment

A candidate may be enrolled for full-time or parttime study. 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. Duration of the Programme

Full-time, 6-12 months; Part-time, 1 year

Any student seeking to complete outside of these timeframes must seek the permission of the Programme Director and the Dean of Science

#### 6. Repeating of Courses

- (a) Re-enrolment to repeat a failed course or to o er any other course o ered in its place will only be permitted in exceptional circumstances with the permission of the Programme Director and the Dean of Science.
- (b) A candidate who fails a course and is not successful under Regulation 6(a) shall not be awarded the Postgraduate Diploma in Antarctic Studies, but will be awarded a Certificate of Proficiency for each course passed at the University of Canterbury.

#### 7. Transfer from Postgraduate Diploma in Antarctic Studies to Master of Antarctic Studies

If the courses passed for the Postgraduate Diploma in Antarctic Studies satisfy the requirements for Part I of the Master of Antarctic Studies and if the candidate meets the standard required by the Programme Director (normally a B grade average or better) then, with the approval of the Dean of Science, a candidate may elect:

- (a) to have the courses transferred to the degree of Master of Antarctic Studies, Part 1, in lieu of being awarded the Diploma; or
- (b) to enter the degree of Master of Antarctic Studies under the Master of Antarctic Studies Regulation 2(a)(ii).

## Schedule to the Regulation for the Postgraduate Diploma in Antarctic Studies

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

A total course weighting of at least 1.00 EFTS must be completed.

# Postgraduate Diploma in Clinical Psychology (PGDipClinPsyc)

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## Requirements for Registration as a Clinical Psychologist

To be eligible for registration as a Psychologist by the Psychologists Board under the Clinical Scope of Practice, applicants must have:

(a) a minimum of a Masters degree in Psychology

from an accredited educational organisation, and

 (b) a postgraduate diploma in clinical psychology (or equivalent) from an accredited educational organisation; and

as part of the postgraduate diploma, applicants must have completed a Board-approved practicum/ internship of at least 1500 hours of supervised

Postgraduate Diploma in Clinical Psychology (PGDipClinPsyc)

#### practice.

It is illegal under the Health Practitioners Competency Assurance Act 2003 to claim to be a psychologist or to practice psychology unless registered. The Psychologists Board o ers

#### 5. Repeating of Courses

All courses must normally be passed at the first attempt (except for the Diploma examination, which is covered by Regulation 6c). Where a candidate's performance or ability to study has been impaired by illness or other circumstances, and an aegrotat consideration is not available, the Dean of Science may permit the candidate to repeat course work and/or undergo assessment one further time.

#### 6. Examination for the Diploma

- (a) Candidates who have qualified to sit the graduating examination for the Diploma must apply in writing to sit the examination.
- (b) Candidates who are unsuccessful in the graduating examination may apply to sit the examination a maximum of two additional times. However, candidates must successfully pass the exam within two years of the first attempt or within five years of first enrolling in the PSYC 670, whichever comes first.

#### 7. Award of the Diploma with Distinction

The Diploma may be awarded with Distinction on the recommendation of the examiners.

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Faculty of Science

her eligibility for Distinction shall not be a ected.

#### 4. Award of Diploma with Distinction or Merit

The Postgraduate Diploma in Engineering Geology may be awarded with Distinction or Merit.

#### 5. Transfer from PGDipEngGeoI to MSc Part II

If the courses passed for the Diploma also satisfy the requirements for Part I of the MSc, and if the courses have been passed with an average grade of at least B+, then, subject to the Admission Regulations and with the approval of the Dean of Science, a

candidate may elect either:

- (a) to have the courses transferred to the Degree of Master of Science in lieu of being awarded the Diploma; or
- (b) to enter for the Degree of Master of Science under Regulation 2(a)(v) if the Diploma has been awarded.

#### 6. Award of PGDipEngGeol instead of MSc Part I

A candidate who has successfully completed Part I of the Degree of Master of Science in Engineering Geology may with the approval of the Head of Department have this part of the degree programme credited towards a Postgraduate Diploma in Engineering Geology instead of the Degree of Master of Science.

# Postgraduate Diploma in Geographic Information Science (PGDipGIS)

## 1. Qualifications Required to Enrol in the Diploma

Every candidate for the Postgraduate Diploma in Geographic Information Science, before enrolling in the degree, shall have:

(a) either:

- qualified for a degree in a New Zealand University which is of relevance to the proposed course of study; or
- ii. presented evidence of ability for advanced level academic study; or
- iii. been admitted ad eundem status to enrol for the Postgraduate Diploma in Geographic Information Science; and
- (b) been approved as a candidate by the Director: GIS and Dean of Science.

#### 2. Admission to the Degree

Students planning to complete a Postgraduate Diploma in GIS must apply for admission to the programme. It is the responsibility of the student to ensure that an up-to-date o cial academic record is sent to the Department of Geography as soon it is available. Students must also Apply to Enrol.

#### 3. Structure of the Programme

- (a) All students admitted to the Postgraduate Diploma in Geographic Information Science will complete a coherent programme of study approved by the Programme 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 the Diploma with Distinction or Merit

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

#### 5. Full-time/Part-time Enrolment

A candidate may be enrolled for full-time or parttime study. 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

# Postgraduate Diploma in Industrial and Organisational Psychology (PGDipIndOrgPsyc)

## 1. Qualifications Required to Enrol in the Diploma

Every candidate for the Diploma in Industrial and Organisational Psychology, before enrolling for a course of study for the diploma, shall have:

- (a) qualified for the Degree of Bachelor of Arts with Honours in Psychology or Master of Arts, or Bachelor of Science with Honours in Psychology or Master of Science; and
- (b) completed such work that is judged by the Head of Department, Psychology, to be equivalent to the University of Canterbury degree of Master of Science in Applied Psychology.

#### 2. Diploma Requirements

To qualify for the diploma a candidate must satisfy the following conditions:

(a) present a certificate, from an organisation approved by the Head of Department of Psychology, stating that the candidate has been employed full-time for at least one year either as a psychologist or in a position in which the practice of psychology is a significant component;

- (b) submit for assessment six reports of cases, or projects, approved by the Head of Department of Psychology, and completed since enrolling for the diploma;
- (c) Diploma

to enrol for the Postgraduate Diploma in Science.

- (b) A candidate shall have met the prerequisites prescribed in the Schedule to these Regulations.
- (c) Every candidate for the diploma shall have been approved as a candidate by the Dean of Science.

#### 3. Structure of the Diploma

- (a) The programme for the Diploma shall consist of a total of 120 points/1.00 EFTS from courses as laid down in the Prescriptions for the subject, to be passed in one year unless in a particular case the Dean of Science resolves otherwise.
- (b) With the approval of the Heads of Departments/ Schools, a candidate may replace courses up to 60 points with 400-level courses prescribed for other subjects.

#### 4. Repeating of Courses

- (a) A candidate who fails any of the courses, or who otherwise does not attain a standard satisfactory to the Dean of Postgraduate Studies shall not be permitted to repeat any of those courses, or o er any other course in their place.
- (b) In the case of a candidate who fails no more than 0.25 EFTS of the diploma programme, the Dean of Science, on the advice of the Head of Department/School concerned, may recommend a pass in the diploma as a whole, provided the candidate has achieved a grade average of at least B- in the diploma programme as a whole, including any failed courses.
- (c) A candidate who fails more than 0.25 EFTS of the diploma programme, or who failed no more

## Schedule to the Regulations for the Postgraduate Diploma in Science

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#### Astronomy

Either: ASTR 424, PHYS 407, ASTR 480 and four courses, as follows:

- (a) at least one course from ASTR 421–423, 425–426
- (b) the remainder from PHYS 401–460, but no more than two courses from PHYS 441–460.

Or: ASTR 424 and seven courses, as follows:

- (a) at least one course from ASTR 421-423, 425-426
- (b) the remainder from ASTR 430, PHYS 401–460, but no more than three courses from PHYS 441–460.

Not all courses may be o ered 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.

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

#### Biochemistry

Courses totalling at least 1.0 EFTS as for Biochemistry honours, selected with the approval of the Programme Co-ordinator. Courses normally selected from BCHM 401 (BIOL 436), BCHM 403 (BIOL 435), BCHM 405 (BIOL 434), BCHM 406 (BIOL 430), BCHM 420, and CHEM421–422. Other suitable courses include: BCHM 407–409, BIOL 431–432, BIOL 451, BIOL 491.

P: 84 points in 300-level courses: 70 points from BCHM 301 (BIOL 331), BCHM 302 (CHEM 325) and BCHM 381; and additional points normally from CHEM 321, CHEM 322, CHEM 324, CHEM 362, CHEM 381, BIOL 313, BIOL 330, BIOL 351 or BIOL 352.

#### Biotechnology

Four courses. BIOL 491 plus at least two other courses selected from BIOL 430–435, BIOL 453, BIOL 492, BIOL 493. The fourth course should be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

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- (1) BIOL 252 or BIOL 254 and BIOL 255; and
- (2) BIOL 352; and
- (3) one course selected from BIOL 313, BIOL 330, BIOL 331.

426 BIOL 331, BIOL 351, BIOL 352.

Coordinator.

#### Chemistry

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

P: 60 points at 300-level in the same subject.

#### **Computer Science**

Eight courses chosen from COSC 401–439, 461–475. P: 60 points at 300-level in the same subject.

#### **Computer Security and Forensics**

Cellular and Molecular Biology

Four courses. At least three courses are to be

selected from BIOL 430–436, BIOL 491, BIOL 493. The

fourth course should be selected with the approval

P: Three courses from BCHM 301, BIOL 313, BIOL 330,

of the School of Biological Sciences Fourth Year

Six courses, including COSC 407, COSC 424, COSC 425, COSC 429, COSC 430, COSC 435. Two additional courses from 400-level COSC and MATH 409(Cryptology) can be selected with permission from the Head of Department.

With permission from the Head of Department, two of the core courses may be substituted with other 400-level computer science papers.

#### Ecology

Four courses to be selected, with the approval of the School of Biological Sciences Fourth Year Coordinator, from BIOL 421, BIOL453, BIOL 470–479, BIOL 490, ENVR 410, ENVR 411, FORE 616. P.

- (1) 60 points from BIOL 370-379; and
- (2) BIOL 309 or BIOL 301 or equivalent (eg, GEOG 309 or PSYC 206).

#### **Environmental Science**

ENVR 410 and 411, plus selected courses as for MSC Part I, with the approval of the Course Co-ordinator

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P: 84 points in appropriate 300-level courses in Science, Engineering, and Forestry approved by the Co-ordinator.

#### **Evolutionary Biology**

Four courses. At least two courses are to be selected from BIOL 421, BIOL 430, BIOL 431, BIOL 470, BIOL 478. The remaining two courses to be selected with the approval of the School of Biological Sciences Fourth Year Coordinator.

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# Postgraduate Diploma in Water Resource Management (PGDipWaterRM)

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## 1. Qualifications Required to Enrol in the Diploma

Every candidate for the Postgraduate Diploma in Water Resource Management, before enrolling for the diploma, shall have:

(a) either

- qualified for a degree in a New Zealand university which is of relevance to the proposed course of study; or
- ii. presented evidence of ability for advanced level academic study; or
- iii. been admitted ad eundem statum to enrol for the Postgraduate Diploma in Water Resource Management.
- (b) been approved as a candidate by the Dean of Science.

## 2. Award of the Diploma with Distinction or Merit

The Postgraduate Diploma in Water Resource Management maybe awarded with Distinction or Merit.

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#### 3. Structure and Requirements of the Diploma

The programme for the Postgraduate Diploma in Water Resource Management is:

- (a) All students admitted to the Postgraduate Diploma in Water Resources Management will complete a coherent programme of study approved by the Director of the Waterways Centre.
- (b) The requirements for the Postgraduate Diploma in Water Resources Management shall be WATR 401 (or WATR 601 at Lincoln University), WATR 402 (WATR 602) and WATR 403 (WATR 603), and at least 30 points from GEOG 404 and ENVR 410 at the University of Canterbury, and LWST 602, MAST 603, ERST 621, ERST 630, ERST 632, ERST 633 and ECON 606 at Lincoln University. The remainder of the courses can be selected from appropriate 400-level courses (or 600-level courses at Lincoln University) as approved by the Director of the Waterways Centre for Freshwater Management, and as listed in the University of Canterbury or other University Calendars relevant to a coherent programme of study for each student.

The total course weight of the programme will be at least 1.0 EFTS.

(c) Candidates must satisfy the Director of the Waterways Centre for Freshwater Management, that they have the necessary prerequisite knowledge to undertake the proposed courses from the Schedule.

#### 4. Full-time/Part-time Enrolment

A candidate may be enrolled for the Postgraduate Diploma in Water Resource Management 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. Duration of the Programme

A candidate shall complete the diploma according to the following timeframe:

Full time, 1 year; Part-time, 2 years

Any student seeking to complete outside of these to bin seeking to complete outside of these to bin seeking to complete outside of these to complete outside of the seeking to complete outside outs

- to have the courses transferred to the degree of Master of Water Resource Management in lieu of being awarded the Diploma; or
- (b) to enter the degree of Master of Water Resource
- Management under Master's Regulation 2(a)(i).

## Schedule to the Regulations for the Postgraduate Diploma in Water Resource Management

- (a) WATR 401 Advanced Water Resources, compulsory (15 points/0.125 EFTS)
- (b) WATR 402 Determinants of Water Availability & Quality, compulsory (15 points/0.125 EFTS)
- (c) WATR 403 Water Management, Policy and Planning, compulsory (15 points/0.125 EFTS)

Other 400-level courses (or higher) relevant to a coherent programme of study with a total course weighting of at least 1.0 EFTS. This should include a minimum of 0.25 EFTS from the following:

- (a) GEOG 404 Resource and Environmental Management (0.25 EFTS)
- (b) ENVR 410 Concepts and Principles of Environmental Science (0.125 EFTS)
- (c) MAST 603 (LU) Mana Kaitiaki (Maori Resource Management) ( 0.167 EFTS)

- (d) ERST 630 (LU) Environmental Policy (0.167 EFTS)
- (e) LWST 602 (LU) Advanced Resource Management Law ( 0.167 EFTS)
- (f) ERST 633 (LU) Integrated Environmental Management (0.167 EFTS)
- (g) ECON 606 (LU) Natural Resource and Energy 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 pre-requisites, will be made available by the Waterways Centre for Freshwater Management. Final course approval will be required from the Director of the Waterways Centre