Graduate Diploma of Science (GDSI) - GradDipSci

CRICOS code (International applicants): 031448M

	On-campus*+ ^ # @	External * @					
Start:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)					
Campus:	Ipswich, Toowoomba	-					
Fees:	Commonwealth supported place Domestic full fee paying place International full fee paying place	Commonwealth supported place Domestic full fee paying place International full fee paying place					
Residential school:		Ipswich (Mandatory)					
Standard duration:	1 year full-time, 2 years part-time						
Program articulation:	To: Master of Science; Master of Science	Master of Science; Master of Science (Research)					

Footnotes

- * Please refer to the Program Structure for further information on mode of offer for each specialisation.
- + The Applied Data Science specialisation is available to international on-campus students at USQ Toowoomba (only if students have completed (STA8170 Statistics for Quantitative Researchers or STA2300 Data Analysis) and CSC1401 Foundation Programming or equivalent in their previous study).
- ^ The Mathematics and Statistics specialisation is available to international on-campus students at USQ Toowoomba Semester 1 only.
- # The Sport and Exercise specialisation is available to International on-campus students at USQ Ipswich.
- @ Sport and Exercise specialisation: courses that include a practical skill competency component and residential school will be conducted at the Ipswich campus

Contact us

Future Australian and New Zealand students	Future International students	Current students	
		Ask a question Freecall (within Australia): 1800 00m5ealand students.838s.838s.83	8s.83Tf1 0.039

Applied Data Science specialisation

This specialisation is designed to provide an opportunity for graduates from all disciplines to gain skills and knowledge in handling data which are commonly known as Big Data, as well as producing and interpreting data analytics. The aim of this program is to provide students with a career path in the Data Science area or an opportunity for advancement in their career.

Environment and Sustainability specialisation

This specialisation provides graduates with knowledge of selected basic concepts and skills associated with environmental and climate science and the broad area of sustainability. The program aims to produce graduates with knowledge and skills for the integration of social, environmental and economic research within an interdisciplinary planning and policy framework and to provide capacity for the sustainable management of natural resources, businesses and communities.

Mathematics and Statistics specialisation

This specialisation aims to provide graduates with skills in key areas of mathematics or statistics that relate to the needs of their profession or industry, including teaching.

Physics and Astronomy specialisation

This specialisation is designed to provide an opportunity to gain knowledge and skills in physics and astronomy and develop scientific research skills. The program provides professional development in science for those in educational or science communication careers.

Sport and Exercise specialisation

This specialisation aims to provide graduates with the opportunity to develop and extend their knowledge and skills relevant to health, fitness and sports performance across the lifespan to an advanced level. The specialisation is designed to meet personal achievement goals or provide for career opportunities within the health, sports and fitness industry such as sports coaches, personal trainers, sports development officers or a range of other roles.

General specialisation

This specialisation enables students who have completed at least 8 courses with at least 4 courses at level 8 from courses within other Graduate Diploma of Science specialisations to exit from the MSCN Master of Science.

Program objectives

On completion of the program graduates should be able to:

- Synthesise an understanding of a complex body of advanced knowledge in a discipline of science.
- Apply established theories to a body of advanced knowledge or practice in a relevant science discipline.
- Critically analyse, evaluate and consolidate on complex advanced information, problems, concepts and theories applicable to a relevant science discipline.
- Interpret and transmit advanced knowledge, skills and ideas, both individually and collaboratively, to a range of audiences.
- Display autonomy, responsibility, adaptability and ethical practise in decision-making and engage in lifelong learning through critical reflection in a range of professional and cultural contexts.

Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 08. Graduates at this level will have advanced knowledge and skills for professional or highly skilled work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting www.aqf.edu.au.

Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Completion of an Australian university three year Bachelor degree in any area, or equivalent.
 Or
- equivalent professional work experience, as determined through the Credit and Exemption Procedure.
- English Language Proficiency requirements for Category 3.

All students are required to satisfy the applicable English language requirements.

If students do not meet the English language requirements they may apply to study a University-approved English language program. On successful completion of the English language program, students may be admitted to an award program.

Program fees

Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of a students' higher education and students pay a student contribution amount, which varies depending on the courses undertaken. Students are able to calculate the fees for a particular course via the Course Fee Finder.

Commonwealth Supported students may be eligible to defer their fees through a Government loan called HECS-HELP.

Domestic full fee paying place

Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. Students are able to calculate the fees for a particular course via the Course Fee Finder.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called FEE-HELP provided they meet the residency and citizenship requirements.

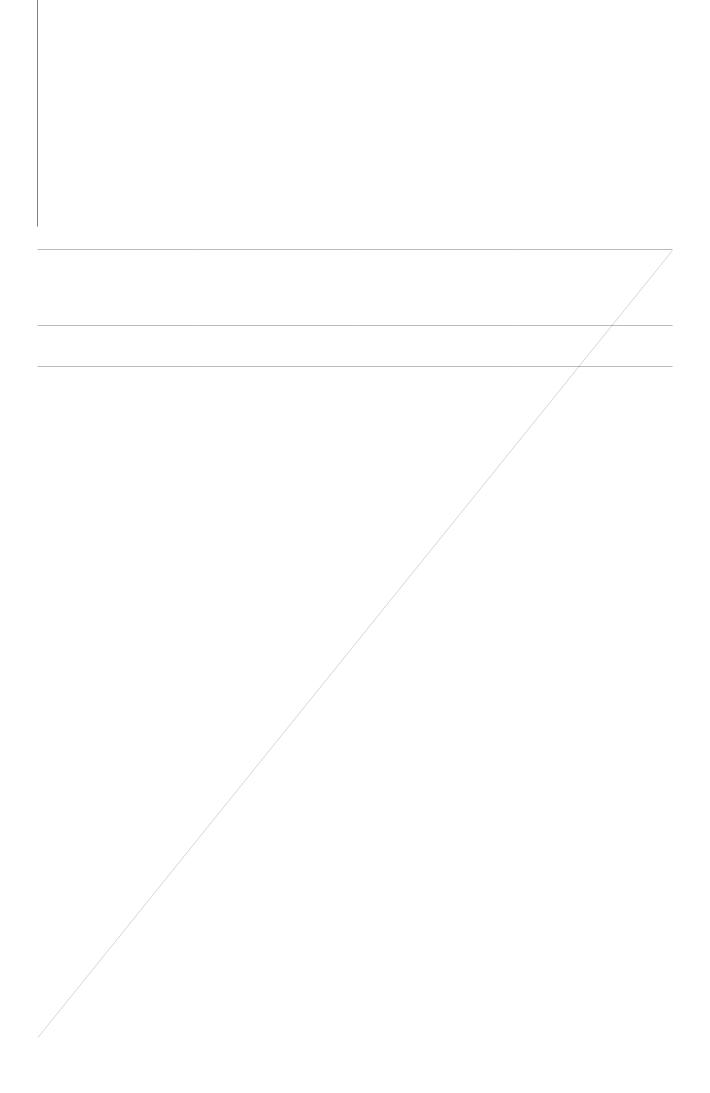
Australian citizens, Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who will be resident outside Australia for the duration of their program pay full tuition fees and are not eligible for FEE-Help.

International full fee paying place

International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. Students are able to calculate the fees for a particular course via the Course Fee Finder.

Program structure

All specialisations within the program consist of eight units of study taken from the specialisation tables. At	
least four units must be at Level 8.IS8rm18.229 1297ao8 1297.538er297ao8 4f2p 1817(IS8rm18.229 1297ao8 1297.538er	r2



Program Coordinator via usq.support@usq.edu.au. This specialisation is not suitable for international on-campus students.

Semester 1	Semester 2
CLI8001 Climate Risk	CLI3302 Adaptation to Climate Change
CLI8204 Global Environmental Systems	CLI8205 Climate and Sustainability
CLI8002 Climate, Human and Environmental Health and Disaster Management *	CLI8003 Climate, Food, Water and Energy Security *

Footnotes

* Two unit course

Applied Data Science specialisation

This specialisation consists of eight courses which are all available on-campus and online.

Students must complete eight courses from the following table. At least four courses must be at Level 8. Students may seek approval from the Discipline Coordinator to enrol in courses not listed in this table.
Semester 1 Courses

Sport and Exercise specialisation

This specialisation consists of four compulsory courses (five units) and three approved courses.

Compulsory Courses (five units)	Approved Courses (choose three)
SES8005 Advanced Exercise Physiology	SES8008 Advanced Anatomy and Physiology
SES8006 Advanced Exercise Programming and Rehabilitation	SES8001 Advanced Biomechanics
SES8007 Advanced Exercise Assessment and Delivery	SES8003 Advanced Motor Control and Learning
MSC8001 Research Project I	PSY3250 Sport and Exercise Psychology
	SES1101 Growth, Development and Lifespan
	SES2203 Physical Activity and Health
	SES1103 Nutrition and Exercise
	SES3206 Strength Training and Conditioning

Footnotes

^ Two-unit course.

General specialisation

This specialisation enables students who have completed at least 8 courses with at least 4 courses at Level 8 from courses within other Graduate Diploma of Science specialisations to exit from the Master of Science. Students can use completed courses that meet the program objectives of the Graduate Diploma of Science to exit with that qualification.

IT requirements

Students should visit the USQ minimum computing standards to check that their computers are capable of running the appropriate software and versions of Internet web browsers and to check the minimum and recommended standards for software. Students will need internet access to retrieve course materials, undertake assessment and participate in course online activities.

Residential schools

The attendance requirement of residential schools within this degree is indicated by the following letters: V = Voluntary; O = Optional; C = Compulsory; R = Recommended; HR = Highly Recommended; M = Mandatory. To find out more about residential schools, visit the Residential School Schedule to view specific dates for your degree, or visit the Policy and Procedure Library.

Sport and Exercise specialisation: For all modes there will be on-campus and practical attendance requirements for some courses. In order to successfully complete the program students must be able to fulfil any designated practical attendance requirements of a one week residential school in each year.

Agricultural Science (approved course)

BIO3318 Plant Microbe Interactions

Sport and Exercise Specialisation

Core Courses:

- SES8005 Advanced Exercise Physiology
- SES8006 Advanced Exercise Programming and Rehabilitation
- SES8007 Advanced Exercise Assessment and Delivery

Approved Courses:

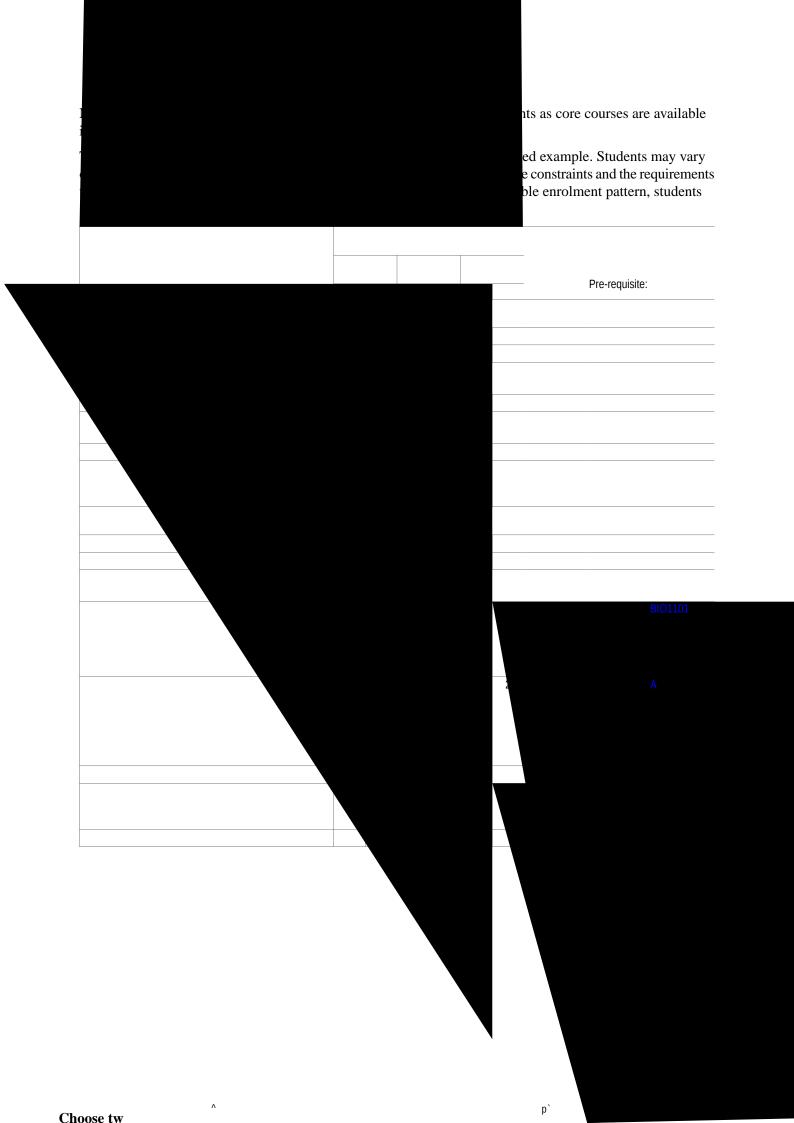
• SES3206 Strength Training and Conditioning

- SES8001 Advanced Biomechanics
- SES8003 Advanced Motor Control and Learning
- SES8008 Advanced Anatomy and Physiology

Articulation

Graduate Diploma of Science students may articulate to the Master of Science coursework program with further completion of eight courses, as required by that program.

A student successfully completing all courses in the Graduate Diploma of Science program will receive full credit towards the Master of Science



Note: This specialisation is not available for International on-campus students as core courses are available in online mode only.

The recommended enrolment pattern for this specialisation is a recommended example. Students may vary

Applied Climate Science specialisation recommended enrolment pattern - full-time S1 or S2 entry

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	Vb^0	Pb j	Vb^0	Pb j	Vb^0	Pb j					
CLI8001 Climate Risk					1	1					
CLI8204 Global Environmental Systems					1	1					
CLI8002 Climate, Human and Environmental Health and Disaster Management *					1	1					
CLI3302 Adaptation to Climate Change					1	2					
CLI8205 Climate and Sustainability					1	2					
CLI8003 Climate, Food, Water and Energy Security *					1	2					

Footnotes

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CSC8500 Advanced Relational Database Design and	1	1			1	1	
Technology [#]							
STA8005 Multivariate Analysis for High-Dimensional Data	1	1			1	1	Pre-requisite or Co-requisite: STA8170 or STA2300

Footnotes

- * On approval from the Program Coordinator, students may be approved to undertake STA8170 Statistics for Quantitative Researchers instead of STA2300.
- # This course is not offered in 2020. Contact the Program Director for an approved Level 8 replacement course.

Environment and Sustainability specialisation recommended enrolment pattern - full-time S1 or S2 entry

Students are able to enrol in any offered mode of a course (on-campus, external or online), regardless of the program mode of study they enrolled in.

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PHY1107 Astronomy 2 *					1	2	
PHY1911 Physics 2					1	2	
SCI8					2	1	Pre-requisite: Students must be enrolled in one of the following programs: MSCN or M