

Graduate Diploma of Science (GDSI) - GradDipSci

CRICOS code (International applicants): 031448M

You are currently viewing the 2023 Handbook. For study in 2024, please refer to the [2024 UniSQ Handbook](#).

	On-campus*+^#@	External * @
Start:	Trimester 1 (January) Trimester 2 (May)	Trimester 1 (January) Trimester 2 (May)
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 (Research)	

Notes:

In 2023 the program follows the Semester calendar. The [Academic Calendar and Important Dates](#) webpage will allow you to view and download a copy of the important dates for the Semester calendar.

Footnotes

- * Please refer to the Program Structure for further information on mode of offer for each specialisation.
- + The Applied Data Science specialisation is only available to international on-campus students at UniSQ Toowoomba and, for students commencing in Semester 1, only to students who have completed ([STA6200 Statistics for Quantitative Researchers](#) or [STA2300 Data Analysis](#) or [STA1003 Fundamental Statistics](#)) and ([CSC1401 Foundation Programming](#) or [CSC5020 Foundations of Programming](#)) or equivalent in their previous study.
- ^ The Mathematics and Statistics specialisation is available to international on-campus students at UniSQ Toowoomba — Semester 1 only.
- # The Sport and Exercise specialisation is available to International on-campus students at UniSQ Ipswich. International on-campus students enrolled at the Ipswich campus must consult with the Program Director in selecting their elective courses to ensure they meet ESOS requirements.
- @ 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 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: study@usq.edu.au	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email: usq.support@usq.edu.au

Program aims

The program aims to produce graduates that are equipped with essential scientific and/or mathematical knowledge and an appreciation of the latest literature and technologies.

Agricultural Science specialisation

This specialisation provides graduates with a knowledge of contemporary issues associated with agricultural production and sustainability. The program aims to produce graduates with the capacity to engage with a range of agriculture related disciplines.

Applied Climate Science specialisation

The global climate service industry is estimated to have a significant and growing economic value. In Australia, the need for 'climate smart' professionals working within their chosen industry is growing with hundreds of job opportunities in industry and the public sector organisation. This specialisation is designed to provide graduates with the knowledge and decision-making skills to work as 'climate smart' professionals in many sectors of economic activity including agriculture, food, w



- * This offering has a highly recommended residential school (linked to an assessment item and non-attendance will mean a student misses an element for assessment preparation or an element of assessment)
- # [SCI3302 Work-Integrated-Learning](#) may be available subject to approval of the Program Director via usq.support@usq.edu.au and availability of relevant placement.

Applied Climate Science specialisation

This specialisation consists of the following courses, which are all available by online mode only. Students may vary their enrolment on the basis of prior studies or professional requirements with the approval of the Program Director 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.

Semester 1	Semester 2	Either Semester
CSC8450 Relational Database Systems	CSC6001 Introduction to Data Science and Visualisation	CSC5020 Foundations of Programming ^{£*}
STA6100 Multivariate Analysis for High-Dimensional Data	CSC6002 Big Data Management [£]	CIS8008 Business Intelligence
CSC6004 Data Mining		STA6200 Statistics for Quantitative Researchers *

Footnotes

- £ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024
- * Semester 1 full-time entry is only available if students have completed ([STA6200](#) or [STA2300](#) or [STA1003](#)) and ([CSC1401](#) or [CSC5020](#)) in their previous study, in which case they will study two appropriate electives instead.

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Mathematics and Statistics specialisation

This specialisation consists of eight units of study. The courses studied will depend on the student's background in mathematics.

Students without [MAT1102](#) (S1) and [STA6200](#) (S1, S2) may not be able to complete in one year.

Students must complete eight courses from the following tables. At least four courses must be at Level 6 and/or 8. Students may seek approval from the Discipline Coordinator to enrol in courses not listed in these tables.

Semester 1 Courses

Footnotes

£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024

HSW8220 is not available ONL in S1 2023

General specialisation

This specialisation enables students who have completed at least 8 courses with at least 4 courses at Level 6 and/or 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

For information technology requirements, please refer to the [minimum computing standards](#).

Residential schools

The attendance requirement of residential schools within this degree is indicated by the following letters: 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](#).296 498.75ence y 0 signthe 1 0 0 1 59.528 524.819 688(elenca pra 0 cl Sce requirement of resi0dent1 Onesemest

Graduate Diploma of Science students may articulate to the [Master of Science \(Research\)](#) program if they meet other requirements for entry into that program. Students must advise the Faculty in writing (usq.support@usq.edu.au) of their intention to articulate to the [Master of Science \(Research\)](#) and should seek the advice of the Program Director with respect to transfer or application for course exemptions prior to graduation from the Graduate Diploma of Science.

Exit points

Students may exit with the [Graduate Certificate of Science](#) if the courses completed satisfy the requirements of a Graduate Certificate of Science specialisation.

Sport and Exercise specialisation - students may exit with the [Graduate Certificate of Sport and Exercise](#) if the courses completed satisfy the requirements of the Graduate Certificate of Sport and Exercise.

Students should consult the Program Director via usq.support@usq.edu.au should they wish to exit to ensure they satisfy requirements for the Graduate Certificate.

Credit

Exemptions/credit will be assessed based on the [UniSQ Credit and Exemption Procedure](#).

Sport and Exercise specialisation:

Ex

Applied Data Science specialisation recommended enrolment pattern - part-time S1 entry

This enrolment pattern is only available to students who have completed (CSC1401 Foundation Programming or CSC5020 Foundations of Programming) and (STA6200 Statistics for Quantitative Researchers or STA2300 Data Analysis or STA1003 Fundamental Statistics) in previous study.

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Footnotes

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Applied Data Science specialisation recommended enrolment pattern - part-time S2 entry

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Footnotes

- § Unavailable online in S3 2023
- \$ Recommended for students wanting to specialise in statistics.
- * This course is topic based. Students should select their topic from the course specification, ensuring they have any prerequisites stated for their chosen topic, and email the examiner for approval prior to enrolment.
- < The on-campus offering of this course is offered in odd—numbered years only.
- # Recommended for students wanting to teach mathematics.
- † Unavailable on-campus at Toowoomba in S1 2023

Mathematics and Statistics specialisation recommended enrolment pattern - part-time S1 entry

The recommended enrolment pattern for this specialisation is an example only for S1 enrolment. Students may vary or select their own pattern, k

**Physics and Astronomy specialisation recommended enrolment pattern - full-time
S1 or S2 entry**

The recommended enrolment pattern for this specialisation is a recommended example. Students may vary or select their own pattern, keeping in mind an

