

## Master of Science (Professional Mathematics/Statistics) (MSMS) - MSc (Prof Math/Stat)

CRICOS code (International applicants): 056706C

**This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should [contact us](#).**

	On-campus	Distance education
<b>Campus:</b>	Toowoomba	-
<b>Fees:</b>	Domestic full fee paying place International full fee paying place	Domestic full fee paying place International full fee paying place
<b>Standard duration:</b>	2 years full-time, 4 years part-time maximum	
<b>Program articulation:</b>	From: <a href="#">Graduate Diploma of Mathematics</a>	

### Contact us

Current students

[Ask a question](#)

Freecall (within Australia): 1800 007 252

Phone (from outside Australia): +61 7 4631 2285

Email: [usq.support@usq.edu.au](mailto:usq.support@usq.edu.au)

### Program focus

The Master of Science (Professional Mathematics and Statistics) program is designed to provide an opportunity for graduates from any discipline to gain skills and knowledge in key areas of mathematics and/or statistics which relate to their needs and the needs of their profession or industry. The aim of this program is, therefore, to provide students with a broad education in mathematical and/or statistical techniques and, if appropriate, studies in other areas of interest to them, for example, Mathematics Education, which will meet their needs and assist them in their professional development. This program is particularly suitable for school teachers who wish to update their mathematics/statistics skills. Students completing MSMS degree with Research Training courses would normally be eligible for PhD studies.

### Professional accreditation

This qualification may be used to satisfy the academic requirements for membership of various professional societies, such as the Australian Mathematical Society, the Statistical Society of Australia and the Australian Society of Operations Research.

### Program aims

The Master of Science (Professional Mathematics/Statistics) program is designed to provide an opportunity for graduates from mathematics and statistics programs, and from programs in other disciplines, to gain advanced skills and knowledge in key areas of mathematics and/or statistics which relate to their needs and the needs of their profession or industry.

The aim of this program is therefore to provide students with a broad advanced education in mathematical and/or statistical techniques and, if appropriate, studies in other areas of interest to them, for example Mathematics Education which will meet their needs and assist them in their professional development.

## Program objectives

At the completion of the program, graduates will:

- be able to demonstrate at least a sound knowledge of some important theories and techniques of applied mathematics and/or statistics
- be able to use a wide range of mathematical and/or statistical techniques to formulate and solve problems from science and technology
- be able to formulate and apply mathematical models in a variety of situations including: statistical, probabilistic, dynamical, algebraic, geometric, and simulation scenarios
- be able to extend and apply mathematical or statistical tools in application to scientific and technical research and development
- be able to use a range of appropriate computer packages to solve problems in statistics and/or mathematics
- have become better problem-solvers and innovative thinkers, who are able to learn new skills independently and efficiently and consequently to succeed in a competitive professional environment
- be able to demonstrate good communication skills in the learning areas
- satisfy academic requirements for accreditation by relevant professional bodies.

## Admission requirements

Applicants may be admitted to the Master of Science (Professional Mathematics/Statistics) if they:

- hold a Bachelor's degree from an Australian university or hold a degree of a recognised university or an approved equivalent qualification in any discipline.
- have knowledge of mathematics at least equivalent to that found in [MAT1102 Algebra and Calculus I](#) and have appropriate communication skills equivalent to those addressed in [CMS1000 Communication and Scholarship](#).

Particular choices of courses within this program may require additional pre-requisite knowledge. For example, some courses have a pre-requisite of basic computer programming skills equivalent to [CSC1401 Foundation Programming](#) and others may require introductory knowledge of optimisation skills such as those addressed in [MAT1200 Operations Research 1](#).

## International Applications

International applicants must have met the [University's English language requirements](#) or have completed the University's [ELICOS/EAP](#).

## Program fees

### 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. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who reside outside Australia pay full tuition fees.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [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. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

## Program structure

The Master of Science (Professional Mathematics/Statistics) consists of 12 units of courses, selected from those courses listed below in the Coursework section, subject to the following conditions:

- at least four units of courses must be at Level 8
- with approval of the Masters Studies Coordinator, at most three units of courses of study, which are not listed in the Coursework section, may be taken from a related area of interest to the student. For example, a student working in bioinformatics might also want to study areas of computing or biology or a student with an interest in Mathematics Education could take suitable courses offered by the Faculty of Education.

All courses may be taken in either on-campus or external mode.

Students wishing to proceed to research in Mathematics or Statistics should study [MSC8001 Research Project Methodology](#) and [MSC8002 Research Project Dissertation](#).

## Program completion requirements

In order to complete the program students must pass 12 units of courses, at least four of which are to be at level 8, and at least nine of which are to be from the courses (including Level 8) listed in the Coursework section. The Masters Studies Coordinator's approval must be obtained before any courses not listed in the Coursework section may be credited towards the program.

## Required time limits

Students have a maximum of 4 years to complete this program.

## Elective courses

Students may take up to three units of elective courses other than those in the Coursework section. Study of these courses requires the approval of the Masters Studies Coordinator and will be assessed on the basis of their suitability for the intended program of work of the student by the Masters Studies Coordinator.

## IT requirements

Students should visit the USQ [Recommended Hardware](#) and [Recommended Software](#) sites 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.

## Residential schools

Optional [residential schools](#) for courses in this program may be provided, depending upon demand.

## Articulation

Holders of the [Graduate Diploma of Mathematics](#) may articulate into the Master of Science (Professional Mathematics/Statistics) with a maximum of eight Level 2, 3 and 4 courses contributing to the Masters program.

## Exit points

Students exiting the program after passing at least four courses may be awarded, upon application, the Graduate Certificate of Science (Professional Mathematics/Statistics) (program code GCSM) provided that all four of the courses passed are in the list of Coursework courses.

Students exiting the program after passing at least eight courses may be awarded, upon application, the Graduate Diploma of Science (Professional Mathematics/Statistics) (program code GDSM), provided that at least seven of the courses passed are in the list of Coursework Section and the other is either in the list of Coursework Section or from a related area and has been studied with the approval of the Masters Studies Coordinator as contributing to the Masters program.

Students wishing to exit as above must discuss the procedures with the Program Coordinator, Department of Mathematics and Computing.

## Exemptions

Exemptions from courses in the Master of Science (Professional Mathematics/Statistics) may be granted for a maximum of six units of study consistent with USQ regulations. The basis for these exemptions must be for

courses completed which are similar to those in the Coursework section. Normally these would be drawn from incomplete postgraduate programs of study and may be studied on a cross-institutional basis.

### **Course transfers**

Transfer of credit for completed USQ courses from incomplete programs to the Master of Science (Professional Mathematics/Statistics) program will be allowed in accordance with USQ regulations provided the courses in question are compatible with the requirements for the Master of Science (Professional Mathematics/Statistics).

Entry is no longer available into the Master of Science (Professional Maths/Stats) (MSMS). Students who are currently enrolled in this program have been contacted and provided with information about options to complete their programs of study. Any students who require further advice regarding their study options should contact the Masters Coordinator (Maths and Stats) within the Department of Mathematics and Computing.