## Master of Science (MSCN) - MSc

QTAC code (Australian and New Zealand applicants): Sport & Exercise (Toowoomba campus: MSCN06; External: MSCN12); Unspecified (Toowoomba campus: MSCN02; External: MSCN08); Mathematics & Statistics (Toowoomba campus: MSCN05; External: MSCN11); Applied Data Science (Toowoomba campus: MSCN01; External: MSCN07); Environment & Sustainability (Toowoomba campus: MSCN04; External: MSCN10); Astrophysics (Toowoomba campus: MSCN03; External: MSCN09)

	<b>On-campus^#*</b> †	External†
Semester intake:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)
C		Semester 2 (July)
Campus:	Toowoomba	-
Fees:	Commonwealth supported place	Commonwealth supported place
	Domestic full fee paying place	Domestic full fee paying place
	International full fee paying place	International full fee paying place
Standard duration	2 years full-time, 4 years part-time	

CRICOS code (International applicants): 078596M

#### Footnotes

^ The Sport and Exercise specialisation is not available to international overseas students.

# Ipswich Campus — Only the Sport and Exercise specialisation is available on-campus at the Ipswich Campus. The Sport and Exercise specialisation is available on-campus Toowoomba (suitable for international on-campus students), on-campus Ipswich (not available for international on-campus students) and external mode..

\* The Environment and Sustainability and Astrophysics specialisations are only available to external students. Therefore, these specialisations are not suitable for international students who wish to study on-campus.

Semester 2 intake for the Mathematics/Statistics specialisation will be subject to the approval of the Program Coordinator.

#### Contact us

interpreting data analytics. The aim of this program is to provide students with a career path in the Data Science or an opportunity for advancement in their career.

Astrophysics

- demonstrate highly-developed practical knowledge and skills relevant to laboratory, clinical and field situations in the sport and exercise area
- display an expert level of evidence-based practice, good communication skills, professional development and research
- demonstrate competent, safe, professional and ethical responsibility as a practitioner displayed in interactions with clients from a range of populations, and a variety of contexts, across the lifespan

#### **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 A0 0 1 205.233 74t92 614.357 Tm(A0) T.QFficationsofofofelopmeolumopulalTjnstitassocim

The Master of Science (Mathematics and Statistics) specialisation consists of 16 courses which are all available in external mode. Students may choose at most three electives and must complete at least eight units at Level 8 (including electiv





REN3301 Biodiversity and Conservation	
REN3302 Sustainable Resource Use	
CLI3302 Adaptation to Climate Change	
MSC8002 Research Project II*	

#### Footnotes

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- # This course will not be offered in 2016
- \* 2 unit course
- ## This course will not be offered in 2016. Refer to recommended enrolment pattern for details.

## Mathematics and Statistics specialisation

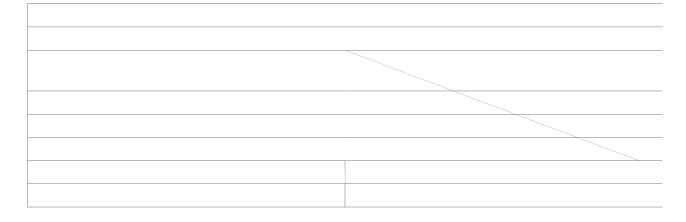
EDU8701 Teaching and Learning in Contemporary Contexts: Theory	
and Practice (in context of	
mathematics or statistics education)	

#### Footnotes

- Students should contact the examiner if there is any problem enrolling in level 8 courses. For this course students require a supervisor and approval of the program coordinator (as detailed in the course specifications). You may need ^ to contact the examiner of the course for a list of supervisors matching your topic.
- \* 2 unit course
- ~~ Available in S1, S2 and S3
- course available external only in 2016 +

#### Sport and Exercise specialisation

#### This specialisation consists of the following 16 units (14 courses):



The supervisors for the professional practice will be required to meet professional ESSA qualification standards as set by USQ or will be assessed for relevant qualification and experience prior to appointment. Supervisors will complete a student evaluation for the professional practice.

Students must successfully complete all the requirements of the professional placement course (SES8299 Advanced Professional Placement) to meet ESSA requirements for possible registration. These requirements will include the completion of appropriate documentation as well as the submission of relevant reports. Students must be available for a prescribed periods of time to undertake a placement in an approved site as required to complete the requirements of this course.

Students will need to keep a logbook record of professional practice experiences along with supervisor details.

The acceptability or otherwise of employment experience, and the period of that type of experience that may be credited towards the 80 hours, will be determined by the Course Examiner of SES8299 Advanced Professional Placement.

All professional placements are subject to the approval of the Program Coordinator. State law in Queensland (Australia) requires that all adults working/undertaking professional experience/researching with children under the age of 18, in the state of Queensland are required to possess a current Working with Children and Young People suitability card (Blue Card). Additionally, it is a USQ requirement that students have completed a cardiopulmonary resuscitation (CPR) course and it is strongly encouraged a First Aid course prior to professional placement. Students will also be required to wear USQ Sport and Exercise shirts and display a student ID card at all times during professional placement. Students must comply with the code of conduct as outlined in the Sport and Exercise professional placement handbook.

## 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.

#### Other program requirements

To qualify for the award of Master of Science (Environment and Sustainability) students must pass 16 units of courses, at least eight of which are to be Level 8 courses listed in the Recommended Enrolment Pattern section. Students who have completed the same courses or similar courses at USQ or elsewhere may replace these with additional electives with the approval of the Faculty of Health, Engineering and Sciences.

In order to complete the Mathematics and Statistics specialisation students must pass 16 units of courses, at least eight of which are to be at Level 8 courses listed in the Recommended Enrolment Pattern section including MSC8001 Research Project I and MSC8002 Research Project II. A maximum of 3 elective courses of Level 3 or above may be taken from courses not appearing in the Recommended Enrolment Pattern section with the approval of the Faculty of Health, Engineering and Sciences. The maximum number of courses other than Mathematics/Statistics courses to be credited must not exceed the number of elective courses (3).

## **Residential schools**

Students completing the 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 of the program.

## Exit points

Students in the Astrophysics or Environment and Sustainability specialisations may exit with the Graduate Certificate of Science on successful completion of four units of study.

Students exiting the Master of Science (Mathematics and Statistics) specialisation after passing at least four courses may be awarded, upon application, the Graduate Certificate of Science provided that at least three of

the courses passed are listed in the Recommended Enrolment Pattern section and approved by the Faculty of Health, Engineering and Sciences.

Students exiting the Master of Science (Mathematics and Statistics) specialisation after passing at least eight courses may be awarded, upon application, the Graduate Diploma of Science, provided that at least seven of the courses passed are listed in the Recommended Enrolment Pattern section; and the other is from a related area and has been studied with the prior approval of the Faculty of Health, Engineering and Sciences as contributing to the Masters program.

Students in the Applied Data Science specialisation may exit with the Graduate Certificate of Science (Applied Data Science) on successful completion of at least four units of study and satisfied the requirements of Grad uate Certificate of Science (Applied Data Science) OR Graduate Diploma of Science (Applied Data Science) on successful completion of at least eight units of study and satisfied the requirements of Graduate Diploma of Science (Applied Data Science).

Students in the Sport and Exercise specialisation may exit with the Graduate Certificate of Sport and Exercise on successful completion of four approved units of study or the Graduate Diploma of Science (Sport and Exercise) after eight approved units of study.

Students wishing to exit as above must discuss the procedures with the Faculty of Health, Engineering and Sciences.

### Credit

Exemptions/credit for all specialisations will be assessed according to USQ procedure.

- Up to **four** units of coursework exemptions or credit will be granted if the student has completed courses equivalent to courses offered in the particular MSCN specialisation in either:
  - USQ's Graduate Certificate of Science; or
  - A Bachelor's degree in a discipline equivalent to the specialisation; or
  - A Graduate Diploma or Bachelor's Honours Degree qualification in a discipline different from the current area of study.
- Up to **eight** units of coursework credit or exemptions will be granted if the student has completed courses equivalent to courses offered in the particular MSCN specialisation in either:
  - Graduate Diploma of Science or Bachelor's Honours in a discipline equivalent to the specialisation.

#### Notes:

- (1) All requests for credits or exemptions need to be sought by the student and approved by the Program Coordinator.
- (2) The Program Coordinator will deem to what extent prior studies are equivalent to the relevant specialisation.

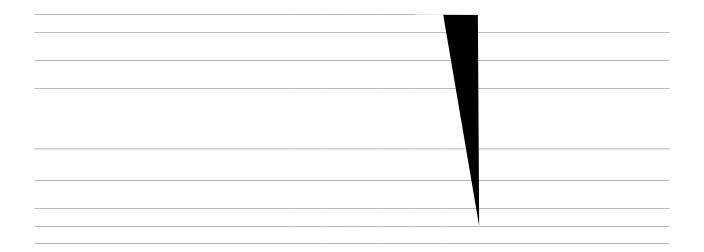
#### Enrolment

# Recommended Enrolment Pattern - Applied Data Science specialisation Full-time (4 Semesters, S1 commencement)

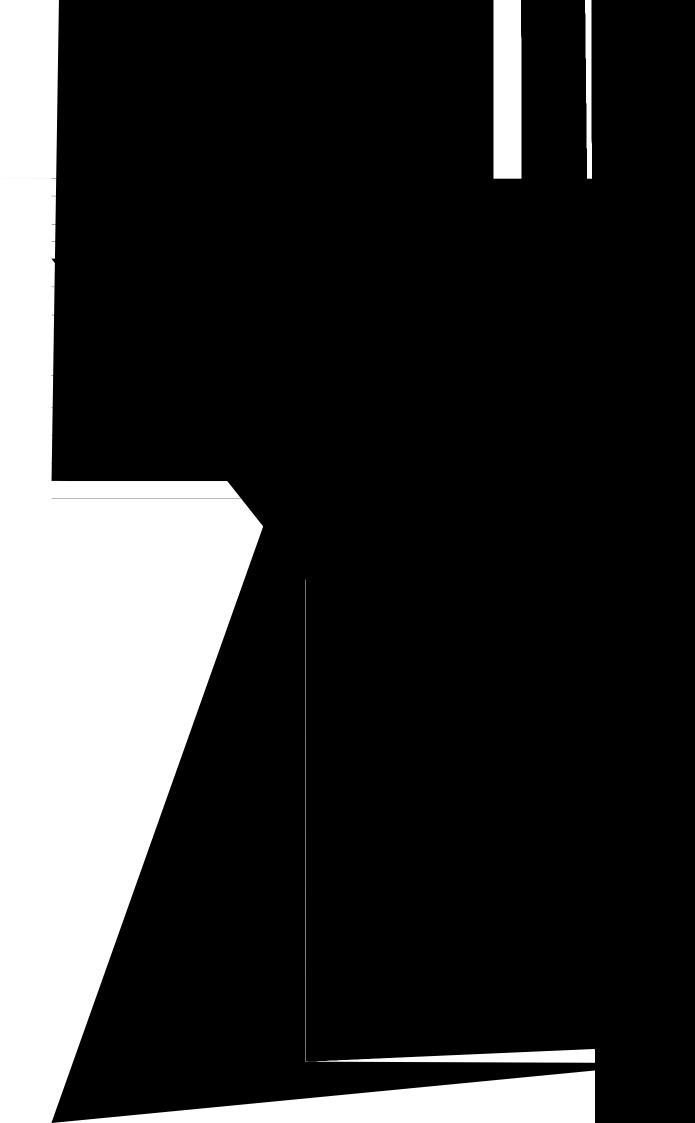
Students are able to enrol in any offered mode of a course (on-campus, external or online), regardless of the program mode of study they enrolled in.

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	Rb^0	Sb j	Rb^0	Sb j	Rb^0	Sb j	-
Year 1							
CIS8008 Business Intelligence	1	1			1	1,2	





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	Ok-`^jmrp (ONC)		Euqbok^i (EXT)		Okifkb (ONL)		
	Rb^0	Sb j	Rb^0	Sb j	Rb^0	Sb j	
Year 2, Semester 2							
Either one of the following							
MSC8001 Research Project I*	2	2			2	2	Pre-requisite: Students must be enrolled in one of the following Programs: MCTN or M COP or MCTE or BSCH or MSCN or have the approval of their program coordinator
MSC8003 Industry Based Research Practice It	2	2			2	2	Pre-requisite: Students must be enrolled in MSCN Program
	2	2			2	2	Pre-requisite: STA2300 and CSC1401



**Recommended Enrolment Pattern - Astroph** 

- # BIO8412 has been discontinued. Students who have not yet taken BIO8412 are recommended to take AGR8001 in S1, 2017 instead. Students expecting to graduate at the end of Semester 2, 2016 may take an elective course in lieu, which may be taken from anywhere across the University; however students are encouraged to contact the Program Coordinator for assistance.
- \*\* CL13302 will be removed from the program structure at the end of 2016. Students who have not yet taken CL13302 are recommended to take ECO8011 instead from 2017 onwards.
- ## REN8203 is currently unavailable and has been replaced with an elective, which may be taken from anywhere across the University; however students are encouraged to contact the Program Coordinator for assistance.

#### Recommended Enrolment Pattern - Environment and Sustainability specialisation Part-time (8 Semesters, S1 or S2 commencement)

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.