

Master of Spatial Science Research (MSSR) - MSpScRes

CRICOS code (International applicants): 066079J

	On-campus	Distance education
Semester intake:	Semester 1 (March) Semester 2 (July)	Semester 1 (March) Semester 2 (July)
Campus:	Toowoomba	-
Fees:	Domestic full fee paying place International full fee paying place Research training scheme (RTS)	Domestic full fee paying place International full fee paying place Research training scheme (RTS)
Standard duration:	3 semesters full-time, 6 semesters part-time.	
Program articulation:	To: Doctor of Philosophy	

Contact us

Future Australian and New Zealand students	Future International students	Current students
Ask a question Freecall (within Australia): 1800 640 678 Phone (from outside Australia): +61 7 4631 5315 Email: studyeng@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 usqassist@usq.edu.au

Program focus

This program is a research degree that produces graduates who are skilled in spatial sciences investigation, evaluation and synthesis. It allows students to enhance and extend their knowledge of a particular surveying or geographic information systems discipline area.

Program objectives

The program is a postgraduate level research program in the fields of geodesy, surveying, photogrammetry, land management, geographic information systems or spatial science education.

The program is intended to allow students to enhance and extend their knowledge of a particular surveying or geographic information systems discipline area. The aim of the degree is to produce graduates who are skilled in spatial science investigation, evaluation and synthesis. Students who successfully complete the Master of Spatial Science Research should be able to demonstrate:

- strong communication skills
- a broad knowledge of the general discipline area of spatial science at an advanced level
- an extensive and detailed knowledge of one significant aspect of spatial science at a level that allows for the proposal and evaluation of innovative solutions to complex technical problems in that area
- an exhaustive knowledge of, and ability to access, sources of information about spatial science
- an ability to utilise sound research methodology and experimental design in an investigative study
- an awareness of the practical application(s), and the implications for professionals, of the research work that has been undertaken
- a high standard of written and verbal English language communication skill.

Admission requirements

Entry to this program will be restricted to students who have demonstrated a high level of ability at the undergraduate level, or who, in pursuit of their occupation or by other means, have demonstrated their ability to successfully undertake studies at this level. Specifically, candidates shall normally be considered for admission to a quota place in the Master of Spatial Science if they either:

- hold a graduate diploma or four-year bachelor degree in surveying, geomatics, science or engineering awarded by Australian university, or an equivalent qualification awarded by an overseas institution
- have demonstrated a high level of academic performance in these studies

or

- hold a three-year bachelors degree in science, geographic information systems or related field of study awarded by an Australian university, or an equivalent qualification awarded by an overseas institution
- have demonstrated a high level of academic performance in their undergraduate studies
- have completed a qualifying program of spatial science studies approved by the Dean of the Faculty of Engineering and Surveying achieving a GPA of 5.0 or more in those studies

or

- have worked as a professional in the field of spatial science for a period of not less than five years and can provide documentary evidence, such as technical publications, that satisfies the Dean of the Faculty that advanced knowledge has been acquired
- successfully complete an interview conducted by the Dean of the Faculty of Engineering and Surveying or his/her nominee to assess the candidate's chance of success in the program.

International students must meet the University's English language proficiency requirements for postgraduate students. Refer to [Academic Regulation 5.4](#)

How to apply

International students

This program is offered to international students. An international student is a person who is not an Australian or New Zealand citizen and not an Australian permanent resident. Please refer to [USQ International](#) for information about entry requirements, visa arrangements and how to apply.

Domestic students

Applications for [Research Master and Doctorate programs](#) should be made directly to USQ.

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](#).

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](#).

Research training scheme (RTS)

The Research Training Scheme (RTS) provides Commonwealth-funded higher degree by research (HDR) students with an 'entitlement' to an exemption from course fees for the equivalent of four years full-time study in an accredited HDR program. If a student's RTS entitlement expires before they have completed their program

they will be required to pay full tuition fees. As there may be limited RTS places available, some students may be required to pay fees for all or part of their program. The USQ [Office of Research and Higher Degrees](#) will advise students of their eligibility for an RTS place.

Program structure

The Master of Spatial Science involves a minimum of either three terms of full-time research or six terms of part-time research at the conclusion of which a candidate prepares and submits for examination, a thesis in research or design. Research topics are selected from areas of geodesy, surveying, photogrammetry, land management, geographic information systems (GIS) or spatial science education.

Program completion requirements

The Master of Spatial Science is comprised of 12 units of study, consisting of one unit of coursework and an 11 unit research project and dissertation.

Students will be required to complete the course [ENG8001 Engineering and Surveying Research Methodology](#) to satisfy the coursework component of the program.

For administrative purposes students will enrol in a selection of the courses listed below in order to complete the 11 unit research dissertation. The 11 units of research will be composed of individual courses ranging in size from one to four units. This provides students with the opportunity to undertake the program in either part-time or full-time mode. Full-time students normally enrol in four units for each term in which they engage in research activities. Part-time students normally enrol in two units for each term in which they engage in research activities.

Programs may be varied to suit the needs of individual students. Enrolment in the above courses is used to assess eligibility for scholarships and awards, and to levy program fees where appropriate, so it is important to consult with the Associate Dean (Research) when finalising enrolment for this program.

All of the courses listed below are ungraded courses, i.e. successful completion will be indicated by a Satisfactory Progress grade.

Some candidates may be required to complete additional coursework, up to a maximum of four single-unit courses, in areas relevant to their proposed field of study. The coursework requirements for each student will be determined by the Associate Dean (Research) in consultation with the Head of Discipline, the student and the project supervisors and approved by the Dean of the Faculty of Engineering and Surveying. Candidates would be expected to demonstrate a high level of achievement in any additional coursework courses.

Required time limits

Full-time students have a maximum of three years to complete this program. Part-time students have a maximum of six years to complete this program.

A pro-rata adjustment of the maximum time period will apply for those students who transfer from one mode of study to another. A pro-rata reduction in the maximum time period will apply to students who are admitted to a program with advanced standing.

IT requirements

Students should refer to the section entitled [Access to Information Technology Facilities](#) in the General Faculty and Program Information section of this Handbook.

Other program requirements

Students enrolling in this program by external mode will need to demonstrate that the educational objectives normally achieved by attendance on-campus are met by other means. This will normally require that:

- there is acceptable local day to day supervision
- the research project is related to their day to day work
- the student has access to adequate local facilities such as a library, laboratory and/or the technical support required to complete the research project

- communication with USQ staff is readily available via telephone, facsimile and/or email
- the USQ supervisor is able to visit the remote site as required
- the student is able to attend the USQ campus for supervision and/or seminars as directed.

Recommended enrolment pattern

Course	Year of program and semester in which course is normally studied						Enrolment requirements	Comments
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
Coursework Course								
ENG8001 Engineering and Surveying Research Methodology		1,2					1,2	
Research Courses								
ENG9011 Independent Research in Engineering and Surveying 1		1						One unit
ENG9012 Independent Research in Engineering and Surveying 2		2						One unit
ENG9021 Independent Research in Engineering and Surveying 1		1						Two units
ENG9041 Independent Research in Engineering and Surveying 1		1						Four units
ENG9022 Independent Research in Engineering and Surveying 2		2						Two units
ENG9042 Independent Research in Engineering and Surveying 2		2						Four units
ENG9023 Independent Research in Engineering and Surveying 3		3						Two units
ENG9043 Independent Research in Engineering and Surveying 3		3						Four units

Notes:

Students must complete the course [ENG8001 Engineering and Surveying Research Methodology](#) and a combination for a total of 11 credit point units of the Independent Research in Engineering and Surveying courses. [ENG8001](#) must be completed satisfactorily during the first term of study.

Programs may be varied to suit the needs of individual students. Enrolment in the above courses is used to assess eligibility for scholarships and awards, and to levy program fees where appropriate, so it is important to consult with the Associate Dean (Research) when finalising enrolment for this program.

All of the courses listed above (except [ENG8001](#)) are ungraded courses, i.e. successful completion will be indicated by a Satisfactory Progress grade.

Some candidates may be required to complete additional coursework, up to a maximum of four single-unit courses, in areas relevant to their proposed field of study. The coursework requirements for each student will be determined by the Associate Dean (Research) in consultation with the Head of Discipline, the student and the project supervisors and approved by the Dean of the Faculty of Engineering and Surveying. Candidates would be expected to demonstrate a high level of achievement in any additional coursework courses.