

## Graduate Certificate in Spatial Science Technology (GCST) - GradCertSpScTech

CRICOS code (International applicants): 066078K

	On-campus	Distance education
<b>Semester intake:</b>	Semester 1 (March) Semester 2 (July)	Semester 1 (March) Semester 2 (July)
<b>Campus:</b>	Toowoomba	-
<b>Fees:</b>	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
<b>Standard duration:</b>	1 semester full-time or 2 semesters part-time or by distance learning	
<b>Program articulation:</b>	To: <a href="#">Graduate Diploma of Geomatic Studies</a> ; <a href="#">Master of Spatial Science Technology</a>	

### Contact us

Future Australian and New Zealand students	Future International students	Current students
<a href="#">Ask a question</a> Freecall (within Australia): 1800 640 678 Phone (from outside Australia): +61 7 4631 5315 Email: <a href="mailto:studyeng@usq.edu.au">studyeng@usq.edu.au</a>	<a href="#">Ask a question</a> Phone: +61 7 4631 5543 Email: <a href="mailto:international@usq.edu.au">international@usq.edu.au</a>	<a href="#">Ask a question</a> Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email <a href="mailto:usqassist@usq.edu.au">usqassist@usq.edu.au</a>

### Program focus

This four unit program is intended to enable students who already hold an undergraduate qualification in another field to develop or extend their knowledge in either surveying or geographic information systems.

### Program objectives

Students who successfully complete the Graduate Certificate in Spatial Science Technology specialising in Geographic Information Systems (GIS) will be able to demonstrate:

- an understanding of the concept of spatial and geographic information systems
- familiarity with the analysis and management of spatial information
- an awareness of potential applications and limitations of geographic information systems
- an understanding of the capture, conversion and output of geographic information
- a professional standard of communication.

Students who successfully complete the Graduate Certificate in Spatial Science Technology specialising in Surveying will be able to demonstrate:

- a capacity for the analysis, evaluation and synthesis of surveying related systems
- enhanced technical skills in surveying technology
- an awareness of the current surveying practices and methods
- a professional standard of communication.

## Admission requirements

To be eligible for admission to the program candidates must possess a three or four-year undergraduate degree, or equivalent, in an approved discipline. Overseas candidates must possess a degree in an approved discipline recognised by the National Office of Overseas Skills Recognition (NOOSR) as awarding degrees that are comparable to the education level of an Australian bachelor degree. Candidates for admission must have demonstrated a high level of academic performance and International applicants must also comply with the University requirements for competency in written and spoken English. Graduates of surveying degree programs who are eligible for registration by an Australian Board of Surveyors will not be permitted to undertake the major study in surveying.

## How to apply

### Domestic students

[Application for postgraduate programs](#) may be made directly to USQ. You should ensure you submit your application by the [closing dates](#).

### 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.

## Program fees

### Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a [student contribution amount](#), which varies depending on the courses undertaken. You 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. 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](#).

## Program structure

The Graduate Certificate in Spatial Science Technology consists of four courses. The maximum time for completion is one year for a full-time student and two years for a part-time student.

Students may commence their studies at the beginning of either Semester 1 or Semester 2. Students may select one of the two majors in the program, either Geographic Information Systems or Surveying. The courses offered in each major are shown in the following tables.

Students wishing to complete the Graduate Certificate in Spatial Science Technology should select four courses from the appropriate table including the core course if specified in the major. Students who may go on to complete the [Master of Spatial Science Technology](#) programs should study the recommended enrolment patterns for that program to ensure that they will satisfy the core course requirements.

## Required time limits

Full-time students have a maximum of one year to complete this program. Part-time students have a maximum of two 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.

## Articulation

Graduates from this program may articulate with full credit into the [Master of Spatial Science Technology](#).

## Exemptions

No exemptions will be permitted towards the Graduate Certificate in Spatial Science Technology.

## Geographic Information Systems Major recommended enrolment pattern

Major study: Geographic Information Systems (Major Study Code: 12613)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<b>Students must complete two of the following core courses:</b>							
<a href="#">GIS1401 Geographic Data Presentation</a>		1		1			
<a href="#">GIS1402 Geographic Information Systems</a>		2		2			
<a href="#">GIS2403 Land Management Systems</a>		2		2			
<a href="#">GIS3404 Geographic Data Visualisation</a>		1		1			
<b>Select the two remaining courses from the following list:</b>							
<a href="#">CSC1401 Foundation Programming</a>		1,2		1,2			
<a href="#">ENV2201 Land Studies</a>		1		1			
<a href="#">GIS1401 Geographic Data Presentation</a>		1		1			
<a href="#">GIS1402 Geographic Information Systems</a>		2		2			
<a href="#">GIS2403 Land Management Systems</a>		2		2			
<a href="#">GIS3404 Geographic Data Visualisation</a>		1		1			
<a href="#">GIS3405 Spatial Analysis and Modelling</a>		2		2		<b>OE</b>	
<a href="#">GIS3406 Remote Sensing and Image Processing</a>		2		2			
<a href="#">GIS4407 Web Based Geographic Information System</a>		2		2		Pre-requisite: <a href="#">GIS1402</a> or Students must be enrolled in one of the following Programs: GCGS or GDGS or MSST or GCNS or GCST or GDNS or MENS	
<a href="#">SVY1110 Introduction to Global Positioning System</a>		2		2			
<a href="#">SVY3202 Photogrammetry and Remote Sensing</a>		1		1			
<a href="#">SVY4203 Urban and Regional Planning</a>		1		1			
<a href="#">SVY4306 Land Law and Valuation*</a>				2			
<a href="#">SVY4309 Practice Management for Spatial Scientists</a>		1		1			

### Footnotes

\* On-campus students should enrol in the external offering of this course.

**OE** Before enrolling in this course students must check that they have satisfied the 'Recommended prior study' or 'Other enrolment' requirements set out in the Other requisites section of the course specification.

### Notes:

The Head of Discipline must approve the choice of courses.

## Surveying Major recommended enrolment pattern

Major study: Surveying (Major Study Code: 12614)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
<b>Select four courses from the following:</b>							
<a href="#">CIV2701 Road Design and Location</a>		1	1	1			
<a href="#">CSC1401 Foundation Programming</a>		1,2		1,2			
<a href="#">GIS1402 Geographic Information Systems</a>		2		2			
<a href="#">GIS2403 Land Management Systems</a>		2		2			
<a href="#">GIS3404 Geographic Data Visualisation</a>		1		1			
<a href="#">SVY1104 Survey Computations A</a>		2		2			Pre-requisite: <a href="#">SVY1102</a> or <a href="#">SVY1500</a> or Students must be enrolled in one of the following Programs: GCST or GDGS
<a href="#">SVY1110 Introduction to Global Positioning System</a>		2		2			
<a href="#">SVY2105 Survey Computations B</a>		2		2			Pre-requisite: <a href="#">SVY2106</a> or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDGS or MSST or MENS
<a href="#">SVY2106 Geodetic Surveying A</a>		1		1			Pre-requisite: <a href="#">SVY1110</a> or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDGS or MSST or MENS
<a href="#">SVY2301 Automated Surveying Systems</a>		1		1			
<a href="#">SVY2302 Mine Surveying</a>		1		1			
<a href="#">SVY2303 Construction Surveying</a>		2		2			
<a href="#">SVY3304 Cadastral Surveying</a>		2		2			Pre-requisite: ( <a href="#">SVY1102</a> and <a href="#">SVY1104</a> ) or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDGS or MSST or MENS
<a href="#">SVY4203 Urban and Regional Planning</a>		1		1			
<a href="#">SVY3107 Geodetic Surveying B</a>		2		2			Pre-requisite: <a href="#">SVY1110</a> or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDGS or MSST or MENS <b>OE</b>
<a href="#">SVY3201 Sustainable Urban Design and Development</a>		2		2			
<a href="#">SVY3202 Photogrammetry and Remote Sensing</a>		1		1			
<a href="#">SVY4306 Land Law and Valuation†</a>				2			
<a href="#">SVY4309 Practice Management for Spatial Scientists</a>		1		1			

### Footnotes

† On-campus students should enrol in the external offering of this course.

**OE** Before enrolling in this course students must check that they have satisfied the 'Recommended prior study' or 'Other enrolment' requirements set out in the Other requisites section of the course specification.

### Notes:

The Head of Discipline must approve the choice of courses.

Students intending to seek registration with the Surveyors Board of Queensland should contact the Surveyors Board of Queensland to confirm enrolment in courses that will satisfy Surveyors Board of Queensland requirements for registration as a surveyor.