

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

CRICOS code (International applicants): 066078K

	On-campus <sup>#</sup>	Online*
<b>Start:</b>	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July) Semester 3 (November)
<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 Spatial Science Technology</a> ; <a href="#">Master of Spatial Science Technology</a>	

## 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

- # The Graduate Certificate of Spatial Science Technology (Geographic Information Systems) is available full-time on-campus commencing in Semester 1 only. The Graduate Certificate of Spatial Science Technology (Surveying) is not available full-time on-campus and therefore is not available to international on-campus students.
- <sup>^</sup> The Graduate Certificate of Spatial Science Technology is not available full-time on-campus commencing in Semester 2.
- \* Semester 3 commencement — only the Geographic Information Systems major is available for part-time commencement in Semester 3.

## Contact us

Future Australian and New Zealand students	Future International students	Current students
<a href="#">Ask a question</a> Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: <a href="mailto:study@usq.edu.au">study@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:usq.support@usq.edu.au">usq.support@usq.edu.au</a>

## Professional accreditation

The Graduate Certificate of Spatial Science Technology is not accredited by any professional bodies other than the University of Southern Queensland.

## Program aims

The Graduate Certificate of Spatial Science Technology (GCST) program produces graduates who are skilled in the area of spatial science theory and evaluation. It allows students to develop and extend their knowledge of a spatial science discipline area for industry application or management purposes.

## Program objectives

On completion of this program graduates should be able to:

- develop and apply specialised theoretical knowledge and technical skills in a spatial science discipline

- evaluate knowledge from professional journals and other information sources to exercise independent judgement and communicate relevant ideas and theoretical concepts in their specialisation
- acquire and demonstrate an integrated understanding of a relevant body of knowledge in a spatial science discipline or area of professional practice.

## 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 AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 08. Graduates at this level will have advanced knowledge and skills for professional or highly skilled work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting [www.aqf.edu.au](http://www.aqf.edu.au).

## Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Completion of an Australian university three or four year Bachelor degree in the area of a discipline approved by the Faculty of Health, Engineering and Sciences, or equivalent  
Or  
A minimum of five (5) years' professional work experience equivalent to a qualification at AQF Level 7.
- English Language Proficiency requirements for Category 3.

All students are required to satisfy the applicable [English language requirements](#).

If students do not meet the English language requirements they may apply to study a University-approved [English language program](#). On successful completion of the English language program, students may be admitted to an award program.

## Program fees

### Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of a students' higher education and students pay a [student contribution amount](#), which varies depending on the courses undertaken. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

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

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [FEE-HELP](#) provided they meet the residency and citizenship requirements.

Australian citizens, Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who will be resident outside Australia for the duration of their program pay full tuition fees and are not eligible for [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, external or online. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

### Program structure

The Graduate Certificate of Spatial Science Technology consists of four units.

Students may commence their studies at the beginning of either Semester 1 or Semester 2 depending on the mode of offer. Students may select one of the two specialisations in the program, either Geographic Information Systems or Surveying. The courses offered in each specialisation are shown in the recommended enrolment patterns which follow.

Students completing the Graduate Certificate of Spatial Science Technology select four courses from the appropriate recommended enrolment pattern, as follows

**Schedule A:** Two core courses (two units)

**Schedule B:** Two specialisation courses (two units)

### Required time limits

Students have a maximum of 2 years to complete this program.

### Specialisation

The specialisation provides students with knowledge and skills in a specific discipline. The two specialisation study areas in the Graduate Certificate of Spatial Science Technology are:

- Geographic Information Systems
- Surveying.

### IT requirements

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

### Articulation

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

### Credit

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

### Geographic Information Systems specialisation recommended enrolment pattern

Specialisation: Geographic Information Systems (Specialisation Study Code: 12613)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Schedule A: Students must complete the following two core courses							
GIS1402 Geographic Information Systems <sup>£</sup>		1				1,3	
ENG6104 Asset Management in an Engineering Environment		1				1	
Schedule B: Select the remaining two courses from the following list							
CSC1401 Foundation Programming <sup>£</sup>		1,2				1,2,3	

Specialisation: Geographic Information Systems (Specialisation Study Code: 12613)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
<a href="#">GIS3407 GIS Programming and Visualisation</a>		1				1	Pre-requisite: <a href="#">GIS1402</a> and <a href="#">CSC1401</a> or S students must be enrolled in one of the following Programs: GDST or MSST or GCST or MENS or MSPT
<a href="#">GIS2405 Spatial Analysis and Modelling</a>		2				2	
<a href="#">GIS3406 Remote Sensing and Image Processing</a>		2				2	
<a href="#">GIS2407 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: GCST or GDST or MSST or MSPT or GCNS 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	

#### 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

## Surveying specialisation recommended enrolment pattern

Specialisation: Surveying (Specialisation Study Code: 12614)							
Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
<b>Schedule A: Students must complete the following two core courses</b>							
SVY1104 Survey Computations A		2				2	Pre-requisite: SVY1102 or SVY1500 or Students must be enrolled in one of the following Programs: GCST or GDST or MSPT
ENG6104 Asset Management in an Engineering Environment		1				1	
<b>Schedule B: Select the remaining two courses from the following list</b>							
SVY1110 Introduction to Global Positioning System		2				2	
SVY2301 Automated Surveying Systems		1				1	Pre-requisite: SVY1104 or Students must be enrolled in one of the following Programs: GCST or GDST or MSPT
SVY2106 Geodetic Surveying A		1				1	Pre-requisite: SVY1110 and SVY1102 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MSPT or MENS
SVY3304 Cadastral Surveying (Queensland)		2				2	Pre-requisite: (SVY1102 and SVY1104) or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MSPT or MENS
SVY3107 Geodetic Surveying B		2				2	Pre-requisite: SVY1110 and SVY2105 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MSPT
SVY3202 Photogrammetry and Remote Sensing		1				1	
SVY4304 Land and Cadastral Law <sup>^*</sup>		2				2	

#### Footnotes

A\*: Unavailable Semester 2, 2023 Springfield On-campus and Toowoomba On-campus