

Graduate Diploma of Geomatic Studies (GDGS) - GradDipGeoStud

CRICOS code (International applicants): 030322M

This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should consider the [Graduate Diploma of Spatial Science Technology](#)

	On-campus	Distance education
Semester intake:	No new admissions	
Campus:	Toowoomba	-
Fees:	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
Standard duration:	2 semesters full-time or 4 semesters part-time or by distance learning	
Program articulation:	From: Graduate Certificate in Spatial Science Technology To: Master of Spatial Science Technology	

Contact us

Current students

Telephone 1800 007 252 (within Australia freecall), +61 7 4631 2285 (from outside Australia), email usq.support@usq.edu.au or submit a question via [Ask USQ](#).

Program focus

The 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 in geographic information systems. The Graduate Diploma program is designed for those wishing to build competencies across a broader discipline area, than the Graduate Certificate in Spatial Science Technology.

Professional accreditation

The [Graduate Diploma of Geomatic Studies](#) is not accredited by any professional bodies other than the University of Southern Queensland.

Program aims

This eight unit program is intended to enable students who already hold an undergraduate qualification in another field to develop, enhance or extend their knowledge in either surveying or in geographic information systems. The Graduate Diploma program is designed for those students who wish to build competencies across a broader discipline area than the Graduate Certificate in Spatial Science Technology.

Program objectives

Students who successfully complete the Graduate Diploma of Geomatic Studies majoring 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 knowledge of geographic information systems at an advanced level
- a professional standard of communication

- a knowledge of the professional journals and other information sources relevant to geographic information systems.

Students who successfully complete the Graduate Diploma of Geomatic Studies majoring 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 knowledge of surveying practice at an advanced level
- a professional standard of communication
- a knowledge of the professional journals and other information sources relevant to the specialised area of geomatics.

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. International applicants must also comply with the University requirements for competency in spoken and written 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.

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](#).

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 Graduate Diploma of Geomatic Studies consists of eight courses and is a one year full-time on-campus program that may also be studied externally over two years. The maximum time for completion is two years for a full-time student and four years for a part-time external 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 program should select eight courses from the appropriate table including the core courses if specified in the major.

Students who may go on to, or wish to transfer into, the [Master of Spatial Science Technology](#) need to select course options to best suit this program transition.

Required time limits

Full-time students have a maximum of two years to complete this program. Part-time students have a maximum of four 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.

Exit points

Students who, for whatever reason, are unable to complete the [Graduate Diploma of Geomatic Studies](#), and who satisfy all of the requirements of the [Graduate Certificate in Spatial Science Technology](#), may be permitted to exit with that award.

Exemptions

Candidates for admission to the program are eligible to seek exemptions in the program in accordance with existing University regulations. The maximum number of exemptions permitted will be four courses (i.e. a total of four units). Studies used as the basis for claims for exemptions must not have been used to meet the requirements of another award. They will normally have been completed within a period of five years prior to the date of application for exemption.

Geographic Information Systems Major recommended enrolment pattern

Major study: Geographic Information Systems (Major Study Code: 12704)							
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	
Students must complete the following core courses:							
ENG4111 Research Project Part 1 [^]		1		1			Pre-requisite: ENG3902 or Students must be enrolled in the following Program: GDST
ENG4112 Research Project Part 2 [^]		2		2			Pre-requisite: ENG4111
GIS2403		2		2			
Choose one of the following two courses:							
GIS1401 Geographic Data Presentation		1		1			
GIS1402 Geographic Information Systems		1		1			
Select the four remaining courses from the following list:							
CIS3001 Object-Oriented Programming with Java		1		1			
CSC1401 Foundation Programming		1,2		1,2			
CSC2402 Object-Oriented Programming in C++		1		1,3			Pre-requisite: CSC1401 or USQIT16 or Students must be enrolled in one of the following Programs: GDT1 or GCSC or GDGS or GCEN or GDET or METC or MCOT or MCTE or MCOP or MPIT or MSBN or MSMS
CIS2002 Database Design and Implementation		1		1,3			
GIS1401 Geographic Data Presentation		1		1			
GIS1402 Geographic Information Systems		1		1			

Major study: Geographic Information Systems (Major Study Code: 12704)							
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	
GIS3404 Geographic Data Visualisation		1		1			
GIS3405 Spatial Analysis and Modelling		2		2			
GIS3406 Remote Sensing and Image Processing		2		2			
GIS4407 Web Based Geographic Information System		2		2			Pre-requisite: GIS1402 or Students must be enrolled in one of the following Programs: GCGS or GDST or MSST or GCNS or GCST or GDNS or MENS
SVY1110 Introduction to Global Positioning System		2		2			
ENV2201 Land Studies		1		1			
REN3302 Sustainable Resource Use		2					
SVY3202 Photogrammetry and Remote Sensing		1		1			
SVY4203 Urban and Regional Planning		1		1			
SVY4306 *				2			
SVY4309 Practice Management for Spatial Scientists				1			

Footnotes

^ It is recommended that these courses are undertaken in the same academic year.

* On-campus students are required to enrol in the external offering of this course.

Notes:

The Head of Discipline must approve the choice of courses.

Surveying Major recommended enrolment pattern

Major study: Surveying (Major Study Code: 12705)							
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	
Core courses							
ENG4111 Research Project Part 1 [^]		1		1			Pre-requisite: ENG3902 or Students must be enrolled in the following Program: GDST
ENG4112 Research Project Part 2 [^]		2		2			Pre-requisite: ENG4111
Select the six remaining courses from the following list:							
CIV2701 Road Design and Location		1		1			Pre-requisite: MAT1500 or ENG1500 or Students must be enrolled in one of the following Programs: GCST or GDGS
ENV2201 Land Studies		1		1			
SVY2301 Automated Surveying Systems		1		1			Pre-requisite: SVY1104 or Students must be enrolled in one of the following Programs: GCST or GDST
SVY2106 Geodetic Surveying A				1			Pre-requisite: SVY1110 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MENS
GIS1402 Geographic Information Systems		1		1			
SVY3202 Photogrammetry and Remote Sensing		1		1			
GIS3404 Geographic Data Visualisation		1		1			
SVY1110 Introduction to Global Positioning System		2		2			
SVY2105 Survey Computations B		2		2			Pre-requisite: SVY2106 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MENS

Major study: Surveying (Major Study Code: 12705)							
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	
SVY3201 Sustainable Urban Design and Development		2		2			
SVY3107 Geodetic Surveying B		2		2			Pre-requisite: SVY1110 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDST or MSST or MENS
SVY4306 *				2			
GIS2403		2		2			
SVY4203 Urban and Regional Planning		1		1			
SVY2302 Mine Surveying		1		1			Pre-requisite: SVY1104 or Students must be enrolled in one of the following Programs: GCNS or GCST or GDNS or GDGS
SVY4309 Practice Management for Spatial Scientists				1			
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
SVY3304 Cadastral Surveying		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 MENS
SVY2303 Construction Surveying		2		2			Pre-requisite: SVY1104

Footnotes

^ It is recommended that these courses are undertaken in the same academic year.

* On-campus students are required to enrol in the external offering of this course.

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.