Everything happens somewhere. Geographic information, or information matched to a location, and its analysis, provides the geographical context to problems and informs decision-making across commercial, agricultural, government and community sectors.

Geographic Information Science (GIS) uses a range of methods and technologies to collect, store, analyse, visualise and distribute geographic or location enabled data to study both natural processes and the interaction of humans with their environment. There is a significant increase in the demand for graduates with advanced analytic, computing, technical and research skills in this area.

The University of Queensland’s postgraduate programs will give you high-quality technical and research skills in core areas of geographic information science, including GIS, remote sensing and spatial analysis.

You will graduate with a thorough understanding and practical experience in basic and advanced computing skills in spatial data collection, analysis and visualisation techniques and the implementation and management of GIS projects.

You will also develop skills in applying GIS and remote sensing technologies, resource identification through remote sensing image analysis, expert systems and decision support systems and research in the field of geographic information science.

UQ graduates are job-ready, with skills that extend across a number of disciplines and professions including ecology, mineral and oil exploration, health, urban and regional planning, mathematics, cartography, surveying, geography and environmental science.

**Career opportunities**

Skills in GIS can be applied to a range of industries and discipline areas including:

- Traditional disciplines for planning,
- built environment, environment and resource management as well as emerging areas in IT
- Local, state and Federal governments to maintain land information for their own purposes and for public uses
- Agencies such as the military, police, emergency services and utilities to increase efficiency in the provision of their services
- Private industry and consultancies who provide services to the growing spatial information industry
- Companies involved in spatial data collection and remote sensing
- IT companies who develop geographical database and specialised geospatial software
- Scientific and research institutions who use geographical information as foundation for their work and spatial data analysis for discovery

CRICOS Provider Number 00025B
RALF D. SCHROERS GIS graduate

After graduating from a Master of Geographic Information Science (GIS) in 2006, Ralf worked for a number of high-profile organisations including other Queensland government science sections and CSIRO.

I like to work on applying methods, combine analysis, data management and presentation as well as develop user friendly applications exploring and assessing data and produce visualisations. In the end it should help to manage our natural environment and improve livelihoods.

Ralf credits his studies at UQ with contributing to his success. The skills I obtained through my degree helped significantly. Sound theoretical background and practical work during my study helped me to be firm in developing concepts, methods and applications that are crucial for my daily work.

Program structure

Graduate Certificate in Geographic Information Science
- 8 units (0.5 year full-time or part-time equivalent)
- Also available online for external students

Graduate Diploma in Geographic Information Science
- 16 units (1 year full-time or part-time equivalent)

Master of Geographic Information Science (#24)
- 24 units (1.5 years full-time or part-time equivalent)
- 32 units (2 years full-time or part-time equivalent)

Sample courses
- Remote Sensing of Environment
- Advanced Remote Sensing of Environment
- Advanced Geographical Information Systems
- Geospatial Processing and Web Mapping
- Geographical Information Systems
- Tools for Environmental Assessment and Analysis
- Relational Database Systems

Entry requirements

Graduate Certificate in Geographic Information Science
- Program code 5028
- CRICOS Code: 01168C
- Bachelor degree in any field, with UQ or equivalent GPA of 4 or above on a 7 point scale; or 2 years of work experience in the same discipline.

Graduate Diploma in Geographic Information Science
- Program code 5086
- CRICOS Code: 003854C
- Bachelor degree in any field or Graduate Certificate in Geographic Information Science, with UQ or equivalent CPA of 4 or above on a 7 point scale.

Master of Geographic Information Science (#24)
- Program code 5177
- CRICOS Code: 003927F
- Bachelor degree in science (mathematics, physics, computer science); environmental science; environmental management; geographical science; geology; surveying; geometrics; engineering; or an approved discipline. UQ or equivalent CPA of 4.5 or above on a 7 point scale.

Master of Geographic Information Science (#32)
- Program code 5610
- CRICOS Code: 084723C
- Bachelor degree in any field or a Graduate Certificate or Graduate Diploma in Geographic Information Science, with UQ or equivalent CPA of 4.5 or above on a 7 point scale.

International Students: English Proficiency
- IELTS overall 6.5; writing 6, reading 6, speaking 6, and listening 6. For other English Language Proficiency Tests and Scores approved for UQ, view the English proficiency policy at future-students.uq.edu.au/english-requirements.

In the event of any conflict arising from information contained in this publication, the material approved by The University of Queensland Senate shall prevail.