

# Bachelor of Applied Science (Surveying) (Honours)

2019

Undergraduate

RMIT offers the only undergraduate surveying degree in Victoria. It is accredited with local and international surveying organisations and prepares you to enter the profession.

This degree provides you with the essential skills and knowledge required to succeed as a professional surveyor. As a surveying student, you will use advanced equipment and specialised software to determine the accurate position of geographic features. These include:

- light beams to electronically measure distance
- satellite positioning technology (GPS) to fix positions

You will gain:

- a thorough understanding of algebra, basic calculus, geometry, and trigonometry
- knowledge of the laws that deal with surveys, property, and contracts
- the ability to use delicate instruments with accuracy and precision

## Career outlook

Surveying is an exciting career often involving travel with a mix of outdoor and indoor work. Opportunities are forecast to keep growing with a current shortage of qualified professionals.

Surveyors play a major role in land development, from the planning and design of land subdivision, through to the final construction of the roads, utilities, and landscape planning. They also provide detailed design plans for the subsequent construction of roads, freeways, tunnels, bridges, pipelines, and high-rise buildings.

Some surveyors work with mining companies on exploration, mining development, and mining operations. Others specialise in hydrographical surveys, working with automated position and sounding equipment on survey ships to map the ocean floor.

You may be employed in small or medium-sized consultancy businesses in the private sector or in government agencies.

Many graduates enter a Professional Training Agreement and become licensed surveyors.

## Pathways

Graduates of the RMIT Advanced Diploma of Surveying who achieve a grade point average (GPA) of at least 2.0 out of 4.0 may be eligible to receive exemption for up to one year credit (equivalent to 108 credit points) if successful in gaining a place.

## Professional recognition

The program is recognised by the Surveyors Registration Board of Victoria (SRBV). As one of the qualifications graduates can complete to apply for registration as a Licensed Surveyor in Victoria.

Graduates are eligible to apply for membership of The Institution of Surveyors Victoria (ISV), the Surveying and Spatial Sciences Institute (SSSI).

The program has international accreditation with the Royal Institute of Chartered Surveyors (RICS) graduates may be eligible for membership with that institute.

The program is accredited by the Land Surveyors Board of Malaysia as a recognised qualification.

## Program snapshot

Program code: BH116

### Duration

Full-time: four years  
Part-time may be available

### Location

City campus

### Selection mode

ATAR (2018: 75.90)

### How to apply

Semester 1: VTAC  
[vtac.edu.au](http://vtac.edu.au)

Semester 2: Direct to RMIT  
[rmit.edu.au/programs/apply/direct](http://rmit.edu.au/programs/apply/direct)

### Fees

For local fee information:  
[rmit.edu.au/programs/fees](http://rmit.edu.au/programs/fees)

### Contact

Info Corner  
330 Swanston Street  
(cnr La Trobe Street)  
Melbourne VIC 3000  
Tel. +61 3 9925 2260

[rmit.edu.au/programs/bh116](http://rmit.edu.au/programs/bh116)

## Program structure

In the early years of the program, you will study the fundamentals of measurement science, cartography and spatial information science (GIS). Other fundamental skills in mathematics, statistics and physics are also covered. In later years, more specialised studies are offered in geodesy, remote sensing, image analysis and professional practice.

Specialised studies in cadastral and engineering surveying, GPS and advanced adjustment methods are central components of the program. Field camps are held in the second and third years to reinforce the theoretical learning and allow you to enhance your knowledge of real-world problems.

Practical work is based on industry-standard software and hardware, the same tools you will find in the workplace. You will have ample opportunities to develop skills and experience with these tools.

Learning support includes a first year transition program, academic coordinators for each year level and an active Geospatial Science Student Association. There is also a dedicated field station to support practical work.

### Program elective examples:

- Accounting in Organisations and Society
- Business Advisory Services
- Digital Business Design and Innovation
- Database Concepts
- Global Mobility Elective
- Global Surveying and Geospatial Experience
- Introduction to Programming
- Mathematics and Statistics
- Project Management Concepts
- Resource Management
- Sustainable Futures

<b>Year 1</b>	Mathematics for Surveying and Geomatics A	Surveying 1	Scientific Communication	Cartography 1
	Physical Geography	Spatial Information Science Fundamentals	Introduction to Physical Modelling	Applied Geospatial Techniques
<b>Year 2</b>	Mathematics for Surveying and Geomatics B	Geospatial Physics and Statistics	Surveying 2	Cartography 2
	Remote Sensing and Photogrammetry 1	Surveying 3	Spatial Information Science Principles	GPS Mapping
<b>Year 3</b>	Cadastral Surveying 1	Surveying 4	Remote Sensing and Photogrammetry 2	Engineering Surveying 1
	Cadastral Surveying 2	Geodesy	Research Procedures	Program option
<b>Year 4</b>	Land Development	Geospatial Science Major Project A	Engineering Surveying 2	University elective
	Professional Practice	Geospatial Science Major Project B	Survey Network Design and Analysis	University elective

Compulsory courses
  Program options
  University electives

Please note: This is an example of the program structure. Courses may change and may not be available each semester.