

BACHELOR OF ENGINEERING IN SURVEYING & SPATIAL INFORMATION SYSTEMS

UNSW Program 3741 UAC Code 425006

SESSION 1

SESSION 2

YEAR 1 Year 1 is flexible, one possible program follows:

GMAT1110	Surveying & GIS	GMAT1400	Land Resource Assessment
MATH1131	Mathematics 1A or Higher Mathematics	MATH1231	Mathematics 1B or Higher Mathematics
ENGG1000	Engineering Design and Innovation	PHYS1121	Physics 1A
ENGG1811	Computing for Engineers or COMP1911 or 1917		Elective from Faculty of Engineering

YEAR 2

GMAT2120	Electronic Survey Instruments	GMAT2130	Integrating Surveying Techniques
GMAT2500	Surveying Computations & CAD	GMAT2210	GIS in Practice
GMAT2700	Geodesy & Spatial Reference Frames	GMAT2550	Data Analysis by Least Squares
MATH2089	Numerical Methods & Statistics		General Education Electives

YEAR 3

GMAT3100	Surveying Applications & Design	GMAT3150	Field Projects 1
GMAT3210	Geoinformation Science	GMAT3600	Earth Observation Systems & Applications
GMAT3420	Cadastral Surveying & Land Law	GMAT3700	Precise GPS Positioning
	General Education Electives		Elective

Suggested Year 3 electives, choose one of:

CVEN0610 Water and Soil Engineering, COMP1911 Computing 1 or Higher, COMP1921 Data Structures and Algorithms

YEAR 4

GMAT4010	Thesis A	GMAT4015	Thesis B
GMAT4150	Field Projects 2	GMAT4720	Survey Business Management
	Elective	GMAT4009	Practical Experience
	Elective		Elective
			Elective

Suggested Year 4 electives, choose four of:

GMAT4400	Land Management & Development Design 1	GMAT4450	Land Management & Development Design 2
GMAT4860	Sustainable Land Development	GMAT9211	Modern Geodesy & Applications
GMAT4900	Principles of GPS Positioning	GMAT4910	GeoIT & Infomobility Applications
MINE3430	Mining Systems	GMAT9300	Aerial & Satellite Imaging Systems
GEOS3911	Environmental Impact Assessment	COMPxxxx	Several COMP courses are available

Other electives are available, with the approval of the Head of School.

Further Information:

- All courses are 6 units of credit except GMAT4009. General Edⁿ. electives total 12 units of credit.
- Typically 20 hours of classes per week for a full time student.
- Combined degrees BE BCom, BE BA and BE BSc are available in Surveying&SIS.
- 60 days Professional Practice (work experience) is a requirement of this program.
- Some electives are not offered every year
- School's website: www.surveying.unsw.edu.au has detailed information about the program and related careers.
- Contact the School survsis@unsw.edu.au or 9385 4182 for advice on:
 - electives for Cadastral Surveying & Land Development or GPS and GIS streams,
 - exemptions for prior qualifications eg TAFE Surveying Diploma,
 - Mid Year Entry.

BACHELOR OF ENGINEERING IN SURVEYING & SPATIAL INFORMATION SYSTEMS

UNSW Program 3741 UAC Code 425006

Exemptions for TAFE Surveying Diploma are shown below (crossed through)

SESSION 1

SESSION 2

YEAR 1 Year 1 is flexible, eg one of the S1 courses can be done in S2, a possible program follows:

~~GMAT1110 Surveying & GIS 1~~

~~ENGG1000 Engineering Design and Innovation~~

MATH1131 Mathematics 1A or Higher Mathematics

ENGG1811 Computing for Engineers or Higher

~~GMAT1400 Land Studies~~

PHYS1121 Physics 1A

MATH1231 Mathematics 1B or Higher Mathematics

~~Elective from Faculty of Engineering~~

YEAR 2

~~GMAT2120 Electronic Survey Instruments~~

~~GMAT2500 Surveying Computations & CAD~~

GMAT2700 Geodesy & Spatial Reference Frames

MATH2089 Numerical Methods & Statistics

GMAT2130 Integrating Surveying Techniques

GMAT2200 GIS in Practice

GMAT2550 Data Analysis by Least Squares

General Education Elective (exempt from 3UoC)

Years 3 and 4 follow normal program

Mar 09