

## Bachelor of Engineering (Geomatic Eng.) Course Structure

The following is an outline of the four year geomatics degree course. A significant course revision took place several years ago. Minor adjustments to the course are made each year in order to keep the course content current.

### YEAR 1

<i>SESSION 1</i>		<i>Hours per week</i>	<i>SESSION 2</i>		<i>Hours per week</i>
MATH1131	Mathematics IA	6	MATH1231	Mathematics IB	6
or MATH1141	Higher Mathematics IA		or MATH1241	Higher Mathematics IB	
PHYS1998	Physics I	6	GMAT2042	Professional Communications	3.5
GMAT1111	Introduction to Computing	4	GMAT2131	Survey Computations	2.5
GMAT1713	Introduction to Geomatic Eng.	3	GMAT2112	Principles of Computer Processing	3
			GMAT2712	Introduction to Land Surveying	3
			GMAT2222	Introduction to Geodesy	2.5

### YEAR 2

<i>SESSION 1</i>		<i>Hours per week</i>	<i>SESSION 2</i>		<i>Hours per week</i>
MATH2009	Engineering Mathematics 2	4	MATH2009	Engineering Mathematics 2	4
MATH2829	Statistics SU	3	GMAT4052	Field Projects I	2
PHYS2969	Physics of Measurements	3	GMAT4011	Surveying Techniques	5.5
GMAT3013	Surveying Instruments	4.5	GMAT4112	Data Analysis & Computing I	3
GMAT3122	Computer Graphics I	2.5	GMAT4222	Geodetic Positioning	2.5
GMAT3231	Geodetic Computations	2.5	GMAT4811	Land Economics & Valuation	2.5
	General Education	2		General Education	2

### YEAR 3

<i>SESSION 1</i>		<i>Hours per week</i>	<i>SESSION 2</i>		<i>Hours per week</i>
CIVL0646	Introduction to Water Engineering	3	CIVL0656	Introduction to Municipal Engineering	3
PLAN3091	Planning Perspectives	2	GMAT6052	Field Projects 2	4
GMAT5011	Engineering Surveying	3.5	GMAT6512	Principles of Image Geometry	3
GMAT5112	Data Analysis & Computing 2	2.5	GMAT6522	Remote Sensing	3
GMAT5122	Computer Graphics 2	2.5	GMAT6532	Spatial Information Systems I	3
GMAT5222	GPS Surveying	2.5	GMAT6621	Cadastral Surveying 2	3
GMAT5621	Cadastral Surveying I	3		General Education	2
	General Education	2			

### YEAR 4

<i>SESSION 1</i>		<i>Hours per week</i>	<i>SESSION 2</i>		<i>Hours per week</i>
GMAT7052	Field Projects 3	3	GMAT8001	Thesis	6
GMAT7512	Photogrammetry & Mapping	3	GMAT8011	Project Surveying	3
GMAT7532	Spatial Information Systems 2	2	GMAT8222	Physical and Space Geodesy	2.5
GMAT7612	Land Mgt & Development Pjt 1	2	GMAT8711	Professional Practice	1
GMAT7722	Project Management I	3	GMAT8612	Land Mgt & Development Pjt 2	2
GMAT7811	Land Subdivision & Development	3	GMAT8722	Project Management 2	3
GMAT8001	Thesis	2	GMAT8311	Offshore Positioning	2.5
GMAT8711	Professional Practice	2			