

name \_\_\_\_\_ number \_\_\_\_\_ date \_\_\_\_\_

**BScE in Geomatics Engineering**

Course Sequence & Programme Assessment

for new students, in effect starting 2010/FA and 2011/WI, see instructions at end of list

year one \_\_\_\_/FA

ENGG 1003	Engg Technical Commun'ns	4	—
ENGG 1015	Intro Design & Prob Solv'g	2	—
ENGG 1001	Engg Practice Lectures	0	—
GGE 1001	Intro Geodesy & Geomatics	5	—
MATH 1003	Intro Calculus	3	—
MATH 1503	Intro Linear Algebra	3	—
PHYS 1081	Physics for Engineers	5	—
		22	

year one \_\_\_\_/WI

CHEM 1982	General Applied Chemistry	3	—
CHEM 1987	Gen Appl Chem Lab	2	—
ECON 1073	Economics for Engrs	3	—
EE 1813	Electricity & Magnetism	4	—
ENGG 1082	Mechanics for Engrs	4	—
MATH 1013	Calculus II	3	—
		19	

year two \_\_\_\_/FA

CS 1003	Intro CS	4	—
GGE 2413	Mapping Concepts & Techny	5	—
GGE 2501	Land Administration I	4	—
MATH 2513	Multi-variable Calculus	4	—
STAT 2593	Prob & Statistics Engr	3	—
		20	

year two \_\_\_\_/WI

GGE 2012	Advanced Surveying	4	—
GGE 3111	Intro Adjustment Calculus	5	—
GGE 3202	Geodesy I	4	—
GGE 4512	Land Administration II	3	—
MATH 3543	Differential Geometry	4	—
GGE 2013	Adv Surv Practicum	4	s
		20+4	

year three \_\_\_\_/FA

CS 3113	Numerical Methods	3	—
GGE 3042	Space Geodesy	5	—
GGE 3122	Adv Adjustment Calculus	5	—
GGE 3342	Imaging & Mapping I	5	—
_____	CSE	3	— see note below
		21	

year three \_\_\_\_/WI

CE 3963	Engineering Economy	3	—
GGE 3022	Survey Design & Analysis	4	—
GGE 4211	Geodesy II	5	—
GGE 4313	Imaging & Mapping III	5	—
GGE 4403	Geog Info Systems [GIS]	4	—
GGE 3023	Surv Des Practicum	4	s
		21+4	

year four \_\_\_\_/FA

GGE 3353	Imaging & Mapping II	5	—
GGE 4022	Precision Surveying	4	—
TME 3313	Managg Engg & IT Proj	3	—
GGE 4700	Design Project	3	— section X, full year course
_____	TE	—	— enter here if not listed, see below
_____	TE	—	— enter here if not listed, see below
		+ 15	

name	number	date
year four _____/WI		
_____ CSE	3	_____ see note below
ENGG 4013 Law & Ethics for Engrs	3	_____
GGE 4700 Design Project	3	_____ section Y, full year course
_____ TE	—	_____ enter here if not listed, see below
_____ TE	—	_____ enter here if not listed, see below
	— + 9	

Total: Core + CSEs + TEs                      149 + 6 + \_\_\_ = \_\_\_ ≥ 160 ch

TECHNICAL ELECTIVES [offering and term may vary from year to year]

GGE 5813	Urban Planning	3 ch	_____ /FA	CSO
GGE 5842	Site Planning	3	_____ /WI	CSO
GGE 5013	Oceanography Hydro Surv	2	_____ /FA/WI	CAPHS
GGE 5023	Tides & Water Levels	2	_____ /FA/WI	CAPHS
GGE 5033	Marine Geology Hydrog	2	_____ /FA/WI	CAPHS
GGE 5041	Engineering Surveying	4	_____ /WI	
GGE 5042	Kinematic Positioning	5	_____ /FA	CAPHS
GGE 5043	Marine Geophysics Hydrog	2	_____ /FA/WI	CAPHS
GGE 5061	Mining Surveying	4	_____ /WI	
GGE 5072	Hydrographic Data Mgt	3	_____ /FA	CAPHS
GGE 5083	Hydro Survey Operations	3	_____	CAPHS only
GGE 5093	Industrial Metrology	4	_____ /WI	
GGE 5222	Gravity Field & Geod Net	4	_____ /WI	
GGE 5242	Spec Studies Geodesy	4	_____ /WI	
GGE 5322	Digital Image Processing	4	_____ /WI	
GGE 5402	Spatial Databases	3	_____ /WI	
GGE 5521	Survey Law	4	_____ /FA	CSO
GGE 5532	Land Economy & Admin	3	_____ /WI	CSO
GGE 5543	Marine Policy, Law, & Adm	3	_____ /FA	CAPHS

With prior Departmental approval, other courses may be taken as technical electives. At least one GGE 5000 level course must be done.

CSO: Cadastral Surveying Option [≥ 168 ch]  
Core + CSEs + GGE 5813 + GGE 5842 + GGE 5521 + GGE 5532

CAPHS: Certificate of Academic Proficiency in Hydrographic Surveying  
Core + CSEs + GGE 5013 + GGE 5023 + GGE 5033 + GGE 5042 + GGE 5043 + GGE 5072 + GGE 5543  
plus GGE 5083

CSE: Complementary Studies Elective: Engg requires at least 3 ch from one of: anthropology, classics, literature, history, philosophy, political science, or sociology; Geomatics requires another 3 ch, preferably from these categories.

Apart from the CSO and CAPHS requirements, the number of ~~GGE~~ TEs [i.e., GGE 5nnn courses and others] should be enough to make a total of at least 160 ch.

Approved Work Experience        \_\_\_ months [employer \_\_\_\_\_; Y \_\_\_\_\_]  
Approved Work Experience        \_\_\_ months [employer \_\_\_\_\_; Y \_\_\_\_\_]

[Total of at least 6 months]

Refer to the Geomatics Engineering programme and course descriptions in the current UNB Undergraduate Calendar.

Enter the letter grade for a course done at UNB. Enter a "T" for any credit transferred. Do either entry only when the course number and credit hours match exactly. Otherwise, leave blank and consult the Director of Undergraduate Studies