

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

**BScE in Geomatics Engineering**

Course Sequence & Programme Assessment

for returning 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 1013 Design & Comm's 6	___
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 Engrs	5	___	see note below	
		22			

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

CHEM 1982	General Applied Chemistry	3	___	= CHEM 1882 Gen Chem 5	___
CHEM 1987	Gen Appl Chem Lab	2	___	"	
ECON 1073	Economics for Engrs	3	___		
EE 1813	Electricity & Magnetism	4	___	= EE 1013 4	___ = EE 1713 4
ENGG 1082	Mechanics for Engrs	4	___		
MATH 1013	Calculus II	3	___		
		19			

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

CS 1003	Intro CS [ <del>C</del> language]	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	___	+ TME3313 = GGE 4541	___
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 Projects	3	___	+ CE3963 = GGE 4541	___
GGE 4700	Design Project	3	___	section X, full year course	
_____	TE		___	enter here if not listed, see below	

\_\_\_ + 15

BScE(Geomatics Engg) 10/11 course seq'ce & ass't for returning students 1

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

name _____	number _____	date _____
year four _____/WI		
_____ CSE	3	see note below
_____ <del>CSE</del>	<del>3</del>	
ENGG 4013 Law & Ethics for Engrs	3	= ENGG 4003 ___ + ENGG 5003 ___
GGE 4700 Design Project	3	section Y, full year course
_____ TE	___	enter here if not listed, see below
	<u>   </u> + 9	

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

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

CE 5313	Urban Planning	3 ch	___ ___/FA	CSO = GGE 5813
CE 5342	Site Planning	3	___ ___/WI	CSO = GGE 5842
GGE 5813	Urban Planning	3 ch	___ ___/FA	CSO = CE 5313
GGE 5842	Site Planning	3	___ ___/WI	CSO = CE 5342
GEOL 4501	Exploration Geophysics I	5	___ ___/WI	CAPHS 5033+5043
GEOL 4512	Exploration Geophysics II	5	___ ___/FA	CAPHS 5033+5043
GGE 5013	Oceanography Hydro Surv	2	___ ___/FA	CAPHS was 4 ch
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 4042
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 GGE5000 level course must be done.

CSO: Cadastral Surveying Option [≥ 168 ch]

Core + CSEs + CE 5313 or GGE 5813 + CE 5342 or GGE 5842 + GGE 5521 + GGE 5532

CAPHS: Certificate of Academic Proficiency in Hydrographic Surveying

Core + CSEs + [GEOL 4501 + GEOL 4512] or [GGE 5033 + GGE 5043] + GGE 5013 + GGE 5023 + GGE 5042 + GGE 5072 + GGE 5543  
plus GGE 5083

[PHYS 1081 + ENGG 1082] have replaced [APSC 1013 + APSC 1023]

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.

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