4-year BSc Geomatics/Computing Recipes

(requires 120 credit hours)

	Geography			Web Design	Programming	Database
1st year	GEOG1102: Intro Human Geography PCE — 3	Academic Writing — 3	Humanities — 3	ACS1805: Intro to Programming — 3	ACS1805: Intro to Programming — 3	ACS1805: Intro to Programming — 3
	GEOG1103: Intro Human Geography PPD — 3	Indigineous — 3	Humanities — 3	ACS1903: Programming Fundamentals II — 3	ACS1904: Programming Fundamentals II — 3	ACS1904: Programming Fundamentals II — 3
	GEOG1201: Intro Atmospheric Science — 3		Humanities — 3	ACS1809: Website Design & Development — 3	MATH1401: Discrete Mathematics — 3	MATH1401: Discrete Mathematics — 3
	GEOG1202: Intro Earth Science — 3	(GEOG3512 is eligible for (3) Indigenous requirement)	Humanities — 3			
2nd year	GEOG2304: Computer Mapping — 3			ACS2814: Applications of Database Systems — 3	ACS2913: Software Requirements — 3	ACS2814: Applications of Database Systems — 3
	GEOG2306: Intro to GIS — 3			ACS2909: Internet Programming — 3	ACS2947: Data structures & algorithms — 3	ACS2947: Data structures & algorithms — 3
	GEOG2309: Statistical Tech & Env Analysis — 3					
	GEOG2316: Intro to Remote Sensng — 3			PHYS2102: Scientific Computing (C+) — 3	PHYS2102: Scientific Computing (C+) — 3	PHYS2102: Scientific Computing (C+) — 3
				PHYS2104: Scientific Computing Python — 3	PHYS2104: Scientific Computing Python — 3	PHYS2104: Scientific Computing Python — 3
	4 of the following: — 12					
	GEOG2207: Climatology					
	GEOG2210: Meteorology					
	GEOG2213: Intro Soil Science					
	GEOG2214: Soil-Vegetation Systems					
	GEOG2215: Mineralogy & Petrology					
	GEOG2216: Physical Geology					
	GEOG2218: Fluvial & Hillslope Processes					
	GEOG2219: Glacial & Periglacial Processes					
	GEOG3210: Hydrology					
3rd year	GEOG3509: Canada — 3			ACS3909: Adv Internet Programming — 3	ACS3913: Software Design & Arch — 3	ACS3902: Database Systems — 3
	GEOG3330: Methods — 3					
	2 of 3 below: — 6					
	GEOG3306: Advanced GIS					
	GEOG3307: Advanced Computer Mapping					
	GEOG3319: Advanced Remote Sensing					
	Human Geo @ 34xx — 6					
4th year	2 of 3 below: — 6				ACS4306: Applied Parallel Prog — 3	ACS4902: Adv Database Systems — 3
	GEOG4320: Projects in Geomatics				ACS4953: Intro to Machine Learning — 3	ACS4904: Database Warehousing — 3
	GEOG4321: Topics in Geomatics I					
	GEOG4322: Topics in Geomatics II					
	Human Geo @ 44xx (or can use GEOG4801: Geog Field Seminar BA) — 6					
	Subtotal (no thesis) — 66	**6**	**12**	**24**	**30**	**30**
				108	**114**	**114**
	GEOG4901: Honours Geography Thesis — 6					
	Total (with thesis) — 72			**114**	**120**	**120**

NOTES: 4-year degrees are 120 hours; so some hours/credits open for other electives if no thesis or with WebDesign option.

CALC40S required from high school.