

4-year BSc Geomatics/Computing Recipes

(requires 120 credit hours)

	Geography	Academic Writing	Indigenous	Humanities	Humanities	Humanities	Humanities	Web Design	Programming	Database			
1st year	GEOG1102: Intro Human Geography PCE	3			Humanities	3		ACS1805: Intro to Programming	3	ACS1805: Intro to Programming	3		
	GEOG1103: Intro Human Geography PPD	3			Humanities	3		ACS1903: 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		
	GEOG1202: Intro Earth Science	3			Humanities	3							
(GEOG3512 is eligible for (3) Indigenous requirement)													
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
	4 of the following:	12						PHYS2104: Scientific Computing Python	3	PHYS2104: Scientific Computing Python	3	PHYS2104: Scientific Computing Python	3
	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							
GEOG4901: Honours Geography Thesis	6												
Total (with thesis)	72			108	114	114							
							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.
CALC405 required from high school.