

Name:
Student ID:
Date Admitted Into Major:

## BACHELOR OF SCIENCE CARTOGRAPHY AND GIS

GENERAL EDUCATION REQUIREMENTS						
	Competencies					
☐ <b>◆</b> Ba	sic College M	ath				
☐ ◆ Re	ading Compr	ehension				
	◆General Education Categories (34-35 credits total)					
♦FYS	First Year Se			3		
♦W-I	Written Comr	nunication - Level I		3		
+OC	Oral Commun	nication		3		
PGR	Personal Gro	wth & Responsibility		3		
CEA	Creative Exp	ession & Appreciation		3		
WC	World Culture	es		3		
HP	The Human F	Past		3		
CS	Contemporar	y Society		3		
SR	Scientific	# Any SR course		3-4		
SIX	Reasoning:	# SR Lab course		4		
QR	Quantitative Reasoning			3		
‡ Writ	Written Communication (Level II and Level III) and Diversity,     Power Dynamics and Social Justice					
W-II	Written Comr	nunication - Level II				
W-III	***************************************	nunication - Level III				
DPDS	Diversity, Pov Social Justice	ver Dynamics and				

Minor/Free Electives (46 credits minimum)  May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.					
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## COURSES IN MAJOR (36-39 credits total) Major Core Courses (15 credits)

GPH	115	Global Climate Change	3	
GPH	115		3	
		OR		
GPH	115H	Honors Global Climate	3	
		Change		
GPH	105	Introduction to		
		Geography	3	
GPH	105H	OR		
		Foundations of Global		
		studies		
GPH	110	OR		
		World Regions		
GPH	140	Intro to Maps & GIS	3	
GPH	301	Intro to Quantitative		
		Geography	3	
GPH	302	Geographic Research	3	

## Major Concentration Courses (9 credits)

GPH	245	Cartography	3	
GPH	340	GIS	3	
GPH	344	Remote Sensing	3	

## Techniques Electives (6-9 credits)

GPH	343	Drones and Aerial Imagery: Applications and Image Analysis		
GPH	346	GIS and Business	3	
GPH	347	GIS Applications	3	
GPH	442	Programming for GIS	3	
GPH	410	Internship in Geography	3-6	
GPH	444	Digital image Processing	3	
GPH OR	348	Crime Mapping	3	
CRJ	370			
Geography Electives (6 credits)				
†GPH		Geography Elective	3	
¶GPH		Geography Elective	3	

- ▼ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation
- Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- # These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.
- ‡ Level II, Level III Written Communications and Diversity, Power Dynamics and Social Justice Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.
- † Course must be Above 200 Level. Course must be Above 300 Level.

♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Effective: 9/2020