

CURRICULUM GUIDE
Geographic Information Science, B.S.
2021-2022

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule.
 Please consult your advisor for specific changes that may need to be made.

	Fall Semester	Spring Semester		
Freshman Year	SCO 100B	1	GEO 100	3
	GLY 104, 107, 108 <i>or</i> 109	3	Gen. Ed. 4 (<i>Nat. Sci.</i>)	3
	Gen. Ed. 1A (<i>ENG 101</i>)	3	Gen. Ed. 1B (<i>ENG 102</i>)	3
	^o STA 215, 270, <i>or</i> MAT 120 (<i>or higher</i>) (<i>fulfills Gen. Ed. 2</i>)	3-4	Gen. Ed. 1C (<i>Oral Comm.</i>)	3
	Gen. Ed. 3A (<i>Arts</i>)	3	Gen. Ed. 6	3
	Gen. Ed. 5B (<i>Social & Behav. Sci.</i>)	3		
	TOTAL	16-17	TOTAL	15
Sophomore Year	GEO 351 (<i>fall only</i>)	3	Gen. Ed. 3B (<i>Humanities</i>)	3
	GEO 353	3	CSC 160, 170, <i>or</i> 174	3
	Gen. Ed. 5A (<i>History</i>)	3	GIS Elective	3
	Gen Ed. 6 (<i>Diversity</i>)	3	Free Elective	3
	Free Elective	3	Free Elective	3
TOTAL	15	TOTAL	15	
Junior Year	GEO 455 (<i>fall only</i>)	3	GEO 453 (<i>spring only</i>)	3
	GEO 456	3	GIS Elective	3
	GIS Elective	3	Free Elective	3
	ENG 300 <i>or</i> 300S	3	Free Elective	3
	Free Elective	3	Free Elective	3
TOTAL	15	TOTAL	15	
Senior Year	Capstone Course (<i>ACCT</i>)	3	GEO 458 (<i>spring only</i>)	3
	GIS Elective	3	Free Elective (<i>upper division</i>)	3
	Free Elective	3	Free Elective (<i>upper division</i>)	3
	Free Elective	3	Free Elective	3
	Free Elective	3	Free Elective	1-2
TOTAL	15	TOTAL	13-14	
TOTAL HOURS TO DEGREE COMPLETION		120		

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division GEO or GLY courses. *ENG 102 or 105, HON 102, MAT 098, MAT 110, MAT 105: See University catalog for details.*

Upper division courses: All students are required to have a minimum of 42 hrs. upper division courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories. If 300 level classes are taken for Gen. Ed., they can be used to fulfill the 42 hours instead of upper division free electives.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: GIS majors will fulfill ACCT with 3 hours from: GEO 349, 349 A-N, 498, GLY 349, 349 A-N, 498, or 499.

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100	Student Success Seminar (1)
CORE COURSE REQUIREMENTS (21)	
GEO 100	Regions and Nations of the World (3)
GEO 351	Geographic Data and Techniques (3) (<i>fall only</i>)
GEO 353	Geographic Information Systems (3)
GEO 453	Advanced GIS (3) (<i>spring only</i>)
GEO 455	GIS Cartography (3)
GEO 456	Remote Sensing (3)
GEO 458	Advanced Geographic Imagery (3) (<i>spring only</i>)
CAPSTONE COURSE (3)	
THREE (3) HOURS selected from:	
GEO 349	Applied Learning in Geography (1-8)
GEO 349 A-N	Cooperative Study: Geography (1-8)
GEO 498	Research Project in Geography (3)
GLY 349	Applied Learning in Geology (1-6)
GLY 349 A-N	Cooperative Study: Geology (1-6)
GLY 498	Capstone Project in Geology (3)
GLY 499	Senior Thesis (3)
MAJOR ELECTIVES (12) (GIS Elective)	
TWELVE (12) HOURS selected from the following:	
GEO 302W	Global Environmental Problems (<i>writing intensive</i>) (3)
GEO 315	Meteorology (3)
GEO 321	Urban Geography (3)
GEO 325 <i>or</i> GEO 325S	Environmental Land Use Planning (3) Environmental Land Use Planning (<i>service learning</i>) (3)
GEO 349	Applied Learning in Geography (1-8)
GEO 349 A-N:	Cooperative Study: Geography (1-8)
GEO 435	Biogeography (3)
GEO 450	Field Studies (3)
GEO 501	Advanced Geography: _____ (3)
GLY 303	Environmental Geoscience (3)
GLY 315	Hydrology (3)
GLY 349	Applied Learning in Geology (1-6)
GLY 349 A-N:	Cooperative Study: Geology (1-6)
GLY 351	Field Methods (3)
GLY 408	Process Geomorphology (3)
GLY 410	Structural Geology (4)
GLY 451	Field Camp (6)
GLY 498	Capstone Project in Geology (3)
GLY 535	Hydrogeology (3)
CIS 335	Data Base Management (3)
CON 320	Construction Surveying (3)
CON 321	Boundary Surveying (3)
SUPPORTING COURSE REQUIREMENTS (6-7)	
^o GLY 104 <i>or</i>	The World Ocean (3)
^o GLY 107 <i>or</i>	Gold and Diamonds (3)
^o GLY 108 <i>or</i>	Earthquakes and Volcanoes (3)
^o GLY 109	Great Moments in Earth History (3)
^o STA 215 <i>or</i>	Introduction to Statistical Reasoning (3)
^o *STA 270 <i>or</i>	Applied Statistics (4)
^o *MAT 120 (<i>or higher</i>)	Trigonometry (3)
*ENG 300 <i>or</i>	Introduction to Technical and Professional Writing (3)
*ENG 300 S	Introduction to Technical and Professional Writing (<i>service learning</i>) (3)
CSC 160 <i>or</i>	Introduction to Programming (3)
CSC 170 <i>or</i>	Intro to Game Programming (3)
CSC 174	Introduction to Programming for Science & Engineering (3)
FREE ELECTIVES (40-41)	

^o Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.