Department of Geography and Planning
Minor Program in
Geographic Information Systems
Requirements Effective Fall 2020

Student Name:_____Student Number:_____

Major Program:_____Major Advisor:_____

Minor Advisor:_____Approved by/Date:_____

Signature / Date

Program Completion:_____

Signature / Date

This Program requires a total of six courses (18 credit hours) distributed as follows:

Required Courses: (3 courses: 9 credit hours)   GRADE   Semester

			GRADE	Semester
1.	GEO 324	Introduction to GIS	_____	_____
2.	GEO 328	Computer Cartography	_____	_____
3.	GEO 427	Geodatabase Systems	_____	_____

Total Credit Hours   9

Elective Courses: (3 courses: 9 credit hours) Select three courses (with Minor Advisor approval). At least one of the Elective Courses must be from Geography and Planning*

1.	GEO 213	GIS for the Social Justice	_____	_____
2.	GEO 214	Intro to Planning	_____	_____
3.	GEO 318	Economic Geography	_____	_____
4.	GEO 325	Introduction to Business GIS		
5.	GEO 338	Environmental App: GIS	_____	_____
6.	GEO 401	Internet Mapping**	_____	_____
7.	GEO 415	Internship (GIS related)	_____	_____
8.	GEO 424	GIS Applications	_____	_____
9.	GEO 425	GIS: Business Applications	_____	_____
11.	_____		_____	_____
12.	_____		_____	_____

Total Credit Hours   9

*Select up to 2 courses, from the list of approved electives, on page 2, or an elective approved by your Minor Advisor.

** Prerequisite, GEO225, is waived for non-Geography and Planning majors.

ANT 213 Archaeological Field Techniques
ANT 367 Archaeology and the Environment
ANT 368 Archaeological Field School
BIO 270 Ecology
BIO 310 Biostatistical Applications
BIO 484 Epidemiology
CRJ 215 GIS for Criminal Justice Careers
CRJ 318 Environmental Crime
CRJ 323 Opportunities, Situations, and Crime: Environmental Criminology
CSC 141 Computer Science I
CSC 142 Computer Science II
CST 221 Database Systems
CSW 131 Introduction to Web Design
CSW 315 Introduction to Web Programming
ESS 201 Field Geology
ESS 323 Gen'l Geol Field Studies of SE Pennsylvania
ESS 343 Geomorphology
ESS 344 Geomorphology II
ESS 435 Remote Sensing
ESS 394 Geology of Northwestern National Parks
ESS 395 Geology of Southwestern National Parks
ENV 445 Risk Assessment
HEA 342 Program Planning and Evaluation
HEA 348 Population Health
HEA 419 Research Methods in Health