

The below curriculum outlines the requirements of the GIS certificate program. Exceptions must be approved by the GIS certificate program coordinator.

<b>Course</b>	<b>Title</b>	<b>Credits</b>
<b>Level One (choose one):*</b>		<b>3.0</b>
GIS 501	Fundamentals of GIScience	
PAF 571	Geographic Information Systems (GIS) and Analysis	
PUP 576/GIS 515	GIS Workshop for Planners	
<b>Level Two (choose two; must be from different categories):</b>		<b>6.0</b>
<b>Geographical Spatial Analysis (2A)</b>		
ABS 485	GIS in Natural Resources	
GIS 471	Geographic Information Analysis	
GIS 562	Location Analysis and Modeling	
<b>Building a GIS from Data Creation to Display (2B)</b>		
GPH 598	Geographic Information Science II	
<b>GIS Application Design, Development, and Distribution (2C)</b>		
GIS 521	Geographic Information Science III	
GIS 561	Optimization Fundamentals for Spatial Analysis	
<b>Remote Sensing and Analysis (2D)</b>		
ABS 586	Remote Sensing in Environmental Resources	
GPH 569	Digital Analysis of Remotely Sensed Data	
<b>Graduate Elective:**</b>		<b>3.0</b>
<b>Graduate Elective:**</b>		<b>3.0</b>
<b>GIS/GPH 591</b>	Seminar: GIS Capstone	<b>1.0</b>
<b>Total credits required for GIS certificate:</b>		<b>16.0</b>

\*Students may waive the Level One course by showing proof of taking a GIS concept/theory course offered either through a University or community college in the last two years. Students waiving the Level One course must take an additional elective to complete the 16 credits needed to earn the certificate.

\*\*Choose electives from an approved list of GIS-related courses

### **Course Requirements**

A maximum of 6.0 credits of 400-level elective coursework may be included on the plan of study but must be approved by the GIS certificate program coordinator.

### **Pre-admission Credit**

No more than 6.0 credits taken prior to admission into the GIS certificate program may be included on the plan of study.

### **Culminating Experience**

The culminating experience is an applied professional project GIS/GPH 591 GIS Capstone.