

Geographic Information Systems (GIS) Certificate Program Checklist

Category	Course Title	Cr.	Completed	Notes
Prerequisite	Select one			Must be completed <i>before</i> entry
	ENVL 2400 – Statistical Analysis of Ecological Systems		[]	
	MARS 2200 – Marine Biology Methods and Analysis		[]	
	MATH 2215 – Calculus I		[]	
	Approved equivalent (Specify: _____)		[]	Submit for coordinator approval
Foundational Course	Required			
	ENVL 3302 – Geographic Information Systems	4	[]	
Tier 1: Advanced Electives	Select one			May take both – 1 as elective
	ENVL 3303 – Advanced GIS	4	[]	
	ENVL 3304 – Remote Sensing	4	[]	
Tier 2: Specialized Electives	Select courses totaling ≥ 4 credits			
	ENVL 4622 – GPS for GIS	2	[]	
	ENVL 3307 – Geodatabase and Web Mapping	2	[]	
	ENVL 3308 – LiDAR Applications	2	[]	
	ENVL 4302 – Applied Geospatial Analysis	2	[]	
	ENVL 4201 – Spatial Statistics	2	[]	
	CIST 3222 – Database Systems	4	[]	
	CIST 2110 – Programming in Python	4	[]	
Capstone Requirement	Required			
	ENVL 4900/4800 – GIS Internship or Senior Project	4	[]	
TOTAL Credits		16	[]	

Additional Notes

- A minimum of **16 credits** is required beyond the prerequisite coursework.
- A grade of **C or higher** is required in all program courses.
- Program progression is customized based on the student's background, disciplinary focus, and career goals.
- Students are encouraged to meet regularly with their preceptor and/or the Center for Academic Advising to ensure all requirements are fulfilled.