

Geography: GIScience Concentration Accelerated to MS

Geography

Name:	Semester Admitted to WCU: Major Declared Date:	FOR STUDENTS ADMITTED STARTING AY 2025-2026
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Table 1: Student information

Requirement	Credits	Course	Semester	Grade	Rep/W*
Academic Foundations					
First-Year Experience (FYE 100)	4				
WRT 120 or WRT 123	3				
WRT 200, or 204, or 205, or 206, or 208, or 220	3				
MAT > 103	3				
Diverse Communities (DIV) ¹	3				
Interdisciplinary (INT) ¹	3				
Science Distributives (2 different prefixes) ²	3				
	3				
Behavioral & Social Science (2 different prefixes) ³	3				
	3				
Humanities (2 different prefixes)	3				
	3				
The Arts	3				
Writing Emphasis ⁴	3				
	3				
	GEO 400 - fulfilled in major				
Speaking Emphasis ⁵	3				
	3				
	GEO 400 - fulfilled in major				
Ethics ⁶	3				
Geography Core (24 credits)					
GEO 102 Physical Geography	3				
GEO 103 Human Geography	3				
GEO 225 Maps & Remote Sensing	3				
GEO 230 Environmental Conservation and Sustainability	3				
GEO 324 Introduction to GIS ⁷	3				
GEO 326 Geographic Analysis ⁷	3				
GEO 385 Field Methods ⁷	3				
GEO 400 Senior Seminar in Geography	3				
GIScience Concentration Requirements (12 credits)					
GEO 328 Computer Cartography	3				
GEO 424 GIS Applications ⁷	3				
GEO 427 Geodatabase Systems ⁷	3				
GIS 316 GIS for Climate Monitoring, Hazards, and Emergency Management	3				
or GEO 401 Internet Mapping					
or GEO 403 Geodesign for Smart Cities					
GIScience Elective Courses (24 credits)⁷					

Elective 1	3				
Elective 2	3				
Elective 3	3				
Elective 4	3				
Elective 5	3				
Elective 6	3				
Elective 7	3				
Elective 8	3				
Capstone (3 credits)					
GEO 404 Senior Project	3				
Other Electives to reach 120 credits (required for all baccalaureate degrees) ⁸	8				

Table 2: Required courses

- 1 GEO 204 Recommended
- 2 BIO110, ESS125 or SCI100 Recommended
- 3 PLN 214 Recommended
- 4 GEO 310 Recommended (also PLN 301, ENG 368/ENG 371)
- 5 GEO 332 or GEO 333 Recommended
- 6 GEO 213 Recommended
- 7 Up to 12 credits can be taken at the graduate level – these can be electives or graduate versions of required courses. See potential graduate courses (and undergraduate courses replaced) in the list below.
- 8 Note: The number of available, general electives will depend on the use of “Recommended” General Education GEO/PLN courses. Strategic use of GenEd courses allows for the addition of Minors and/or Sub-Baccalaureate Certificates.

GIScience Elective Course Options (Electives should be selected from the list below; others may be approved by your advisor):

GEO 200 Global Cities
 GEO 204 Introduction to Urban Studies
 GEO 213 GIS for Social Justice
 GEO 235 Geography of Agriculture, Food, and Sustainability
 GEO 307 Fundamentals of UAS and Image Analysis
 GEO 310 Population Geography
 GEO 312 Urban Geography
 GEO 316 GIS for Climate Monitoring, Hazards, and Emergency Management
 GEO 318 Economic Geography
 GEO 325 Introduction to Business GIS
 GEO 332 Environmental Crises
 GEO 333 Sustainable Cities
 GEO 334 Sustainable Living
 GEO 338 Environmental Application of GIS
 GEO 341 Landscape Ecology
 GEO 352 Environmental Geopolitics
 GEO 401 Internet Mapping
 GEO 403 GeoDesign for Smart Cities
 GEO 415 Internship in Geography
 GEO 424 GIS Applications
 GEO 425 Business GIS Applications

PLN 214 Introduction to Planning

PLN 316 Planning for Resilient Communities and Natural Disasters

PLN 320 Land Use Planning

PLN 322 Land Development Controls

PLN 331 Transportation Planning

PLN 336 Environmental Planning

PLN 337: Land Conservation

PLN 354 Geography & Planning of Housing

Accelerated B.S. in Geography to M.S. in Geography Program*

*Any Geography major in the Environmental Geography, Location Analytics, GIScience, or General Geography Concentration, with junior-standing (a minimum of 60 completed credits) and a 3.0 cumulative GPA or higher may substitute up to 12 graduate credits (4 courses) (with approval of the Graduate Advisor) to satisfy the B.S. program. Department Graduate courses include (but are not limited to):¹

GEO 502	Topical Seminar in Geography
GEO 505	Planning Design
GEO 506	Seminar in Physical Geography
GEO 507	Internet Applications of Geographic Information Systems
GEO 521	Suburbanization and Land Development
GEO 524	Population Processes
GEO 525	Urban and Regional Planning
GEO 526	Metropolitan Systems and Problems
GEO 531	Transportation Planning
GEO 538	Environmental Modeling with Geographic Information Systems
GEO 554	Housing and Planning in America
GEO 577	Geodatabases
PLN 527	Planning Law and Organization
PLN 528	Economic Development Planning
PLN 536	Environmental Planning

Potential Graduate Course Substitutions to Satisfy B.S. Geography Degree Requirements

PLN 528 can replace GEO 318
GEO 524 can replace GEO 324
GEO 509 can replace GEO 326
GEO 531 can replace PLN 331
GEO 538 can replace GEO 338
GEO 585 can replace GEO 385
GEO 507 can replace GEO 401
GEO 584 can replace GEO 424
GEO 556 can replace GEO 425
GEO 577 can replace GEO 427

¹ Any of the Department's 500-level courses may count towards the 12 graduate credits allowed. Department clearance is required for Undergraduate students to add Graduate courses to their schedule.