

B.S. IN GEOGRAPHY

College of Business and Public Management

Curriculum

The Bachelor of Science in Geography offers a choice of five emphases (called “tracks”): traditional geography (cultural, environmental, and economic geography including an international perspective), geographic information science (GIScience), locational analytics, environmental geography, and elective social studies teacher certification. The geographic information science and locational analytics areas emphasize specialized skill development. Internships are available and are recommended for qualified students.

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
Academic Foundations		
	First Year Experience requirement	4
	English Composition requirement ¹	6-7
	Mathematics requirement	3-4
	Interdisciplinary requirement	3
	Diverse Communities requirement	3
	Ethics requirement	3
Distributed Disciplinary Foundations		
	Science requirement	6-8
	Behavioral & Social Science requirement	6
	Humanities requirement	6
	Arts requirement	3
ADDITIONAL BACCALAUREATE REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
University Requirements		
	Writing Emphasis requirement	9
	Speaking Emphasis requirement	9
	SPK 208 Public Speaking or SPK 230 Business and Professional Speech Communication	
Degree Requirements		
	Capstone requirement	1-15
MAJOR REQUIREMENTS		
Core Courses		
GEO 102	Physical Geography	3
GEO 225	Introduction to Maps and Remote Sensing	3
GEO 230	Environmental Conservation and Sustainability	3
GEO 310	Population Geography	3
GEO 324	Intro to Geographic Information Systems	3
GEO 326	Geographical Analysis	3
GEO 400	Senior Seminar In Geography	3
Additional Geography or Social/Behavioral Science Courses		
	Select one from the following list:	3
	GEO 101 World Geography ²	
	GEO 103 Human Geography ²	
	GEO 104 Introduction to Geospatial Technology and Analytics ²	
Track Requirements		

Select one of the following tracks:

Geography Track

Select three courses from specified groups ³	9
Select three courses from specified lists of courses ³	9

Locational Analytics Track

GEO 318	Economic Geography	3
GEO 325	Intro Business GIS	3
GEO 425	Business GIS Applications	3
Select three courses from specified lists of courses ³	9	

Geographic Information Science Track

GEO 328	Computer Cartography	3
GEO 424	Geographic Information Systems Application	3
GEO 427	Geodatabase System	3
Select three courses from specified lists of courses ³	9	

Environmental Geography Track

GEO 205	Geography of Agriculture, Food & Sustainability	3
GEO 332	Environmental Crises	3
GEO 334	Sustainable Living	3
Select three courses from specified lists of courses ³	9	

Elective Social Studies Teacher Certification Track

See program page for specific Certification requirements.

Related/Cognate Requirements

Courses (taken under advisement) that are specifically related to identified career aspirations, and chosen outside general requirements, or geography core: 15

Required of all majors:

ENG 368	Business and Organizational Writing
or ENG 371	Technical Writing

Required for locational analytics track: four courses selected under advisement

Required of geographic information science track: four courses selected under advisement

Required of environmental geographic track: four courses selected under advisement

Capstone Requirement

GEO 404	Senior Project in Geography ⁴	3
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Student Electives

Select 3-15 credits

Total Minimum Credits Required 120

¹ Geography majors must pass WRT 120 and WRT 200 (or equivalent) with a grade of 2.0 or higher.

² Geography majors must pass GEO 101, GEO 103, or GEO 104 with a grade of 2.0 or higher.

³ Taken under advisement

⁴ This course fulfills the Capstone requirement

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

Any Geography major with junior-standing in the Environmental, GIS, or Geography track, with a 3.0 cumulative GPA or higher may substitute up to 12 graduate credits to satisfy the B.S. program.

Code	Title	Credits
Elective Courses		
Select from the courses below:		
GEO 502	Topical Seminar in Geography	3

GEO 505	Planning Design	3
GEO 506	Seminar in Physical Geography	3
GEO 507	Internet Applications of Geographic Information Systems	3
GEO 521	Suburbanization and Land Development	3
GEO 524	Population Processes	3
GEO 525	Urban and Regional Planning	3
GEO 526	Metropolitan Systems and Problems	3
PLN 527	Planning Law and Organization	3
GEO 531	Transportation Planning	3
PLN 536	Environmental Planning	3
GEO 538	Environmental Modeling with Geographic Information Systems	3
GEO 554	Geography and Planning of Housing	3
GEO 577	Geodatabases	3

Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Progress Report (DPR) via myWCU regularly. For more information, visit wcupa.edu/DegreeProgressReport (<http://wcupa.edu/degreeprogressreport/>).

The following is a sample suggested course sequence for this program; course offerings and availability are not guaranteed. Students should consult their academic advisor with any questions.

B.S. in Geography: General Track

Course	Title	Credits
Year One		
Semester One		
GEO 102	Physical Geography	3
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
General Education Course		3
General Education Course		3
Credits		16
Semester Two		
GEO 101	World Geography	3
GEO 230	Environmental Conservation and Sustainability	3
MAT 103	Introduction to Mathematics (or higher)	3
SPK 208	Public Speaking	3
General Education Course		3
Credits		15
Year Two		
Semester Three		
GEO 225	Introduction to Maps and Remote Sensing	3
WRT 200	Critical Writing and Research	3
Geography Elective		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Four		
GEO 204	Introduction to Urban Studies	3
Geography Elective		3
Geography Elective		3
General Education Course		3

General Education Course		3
Credits		15
Year Three		
Semester Five		
GEO 324	Intro to Geographic Information Systems	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Six		
GEO 310	Population Geography	3
GEO 326	Geographical Analysis	3
ENG 368	Business and Organizational Writing or Technical Writing	3
ENG 371		
Geography Elective		3
Elective		3
Credits		15
Year Four		
Semester Seven		
GEO 400	Senior Seminar In Geography	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Elective		3
Credits		15
Semester Eight		
GEO 404	Senior Project in Geography	3
Cognate Course		3
Geography Elective		3
Geography Elective		3
General Elective		3
Credits		15
Total Credits		121

B.S. in Geography: GIScience Track

Course	Title	Credits
Year One		
Semester One		
GEO 102	Physical Geography	3
GEO 104	Introduction to Geospatial Technology and Analytics	3
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
General Education Course		3
Credits		16
Semester Two		
GEO 101	World Geography	3
GEO 230	Environmental Conservation and Sustainability	3
MAT 103	Introduction to Mathematics (or higher)	3
SPK 208	Public Speaking	3
General Education Course		3
Credits		15

Year Two		
Semester Three		
GEO 225	Introduction to Maps and Remote Sensing	3
GEO 324	Intro to Geographic Information Systems	3
WRT 200	Critical Writing and Research	3
Geography Elective		3
General Education Course		3
Credits		15
Semester Four		
GEO 204	Introduction to Urban Studies	3
GEO 328	Computer Cartography	3
Geography Elective		3
General Education Course		3
General Education Course		3
Credits		15
Year Three		
Semester Five		
GEO 427	Geodatabase System	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Six		
GEO 310	Population Geography	3
GEO 326	Geographical Analysis	3
GEO 424	Geographic Information Systems Application	3
ENG 368 or ENG 371	Business and Organizational Writing or Technical Writing	3
General Education Course		3
Credits		15
Year Four		
Semester Seven		
GEO 400	Senior Seminar In Geography	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Eight		
GEO 404	Senior Project in Geography	3
Cognate Course		3
Geography Elective		3
Geography Elective		3
General Elective		3
Credits		15
Total Credits		121

B.S. in Geography: Environmental Track

Course	Title	Credits
Year One		
Semester One		
GEO 102	Physical Geography	3
GEO 205	Geography of Agriculture, Food & Sustainability	3

WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
General Education Course		3
Credits		16
Semester Two		
GEO 101	World Geography	3
GEO 230	Environmental Conservation and Sustainability	3
MAT 103	Introduction to Mathematics (or higher)	3
SPK 208	Public Speaking	3
General Education Course		3
Credits		15
Year Two		
Semester Three		
GEO 214	Introduction to Planning	3
GEO 225	Introduction to Maps and Remote Sensing	3
GEO 324	Intro to Geographic Information Systems	3
WRT 200	Critical Writing and Research	3
General Education Course		3
Credits		15
Semester Four		
GEO 204	Introduction to Urban Studies	3
GEO 332	Environmental Crises	3
General Education Course		3
General Education Course		3
General Education Course		3
Credits		15
Year Three		
Semester Five		
GEO 324	Intro to Geographic Information Systems	3
Cognate Course		3
Cognate Course		3
General Education Course		3
General Education Course		3
Credits		15
Semester Six		
GEO 310	Population Geography	3
GEO 326	Geographical Analysis	3
GEO 334	Sustainable Living	3
ENG 368 or ENG 371	Business and Organizational Writing or Technical Writing	3
General Education Course		3
Credits		15
Year Four		
Semester Seven		
GEO 400	Senior Seminar In Geography	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Eight		
GEO 404	Senior Project in Geography	3
Cognate Course		3
Geography Elective		3

Geography Elective	3
General Education Course	3
Credits	15
Total Credits	121

B.S. in Geography: Location Analytics Track

Course	Title	Credits
Year One		
Semester One		
GEO 102	Physical Geography	3
GEO 104	Introduction to Geospatial Technology and Analytics	3
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
General Education Course		3
Credits		16
Semester Two		
GEO 101	World Geography	3
GEO 230	Environmental Conservation and Sustainability	3
MAT 104	Introduction to Applied Mathematics (or higher)	3
SPK 208	Public Speaking	3
General Education Course		3
Credits		15
Year Two		
Semester Three		
GEO 225	Introduction to Maps and Remote Sensing	3
GEO 318	Economic Geography	3
GEO 324	Intro to Geographic Information Systems	3
WRT 200	Critical Writing and Research	3
General Education Course		3
Credits		15
Semester Four		
GEO 204	Introduction to Urban Studies	3
Geography Elective		3
General Education Course		3
General Education Course		3
General Education Course		3
Credits		15
Year Three		
Semester Five		
GEO 325	Intro Business GIS	3
Cognate Course		3
Cognate Course		3
General Education Course		3
General Education Course		3
Credits		15
Semester Six		
GEO 310	Population Geography	3
GEO 326	Geographical Analysis	3
ENG 368	Business and Organizational Writing or or Technical Writing	3
ENG 371		
GEO 425	Business GIS Applications	3
General Education Course		3
Credits		15

Year Four		
Semester Seven		
GEO 400	Senior Seminar In Geography	3
Cognate Course		3
Cognate Course		3
Geography Elective		3
General Education Course		3
Credits		15
Semester Eight		
GEO 404	Senior Project in Geography	3
Cognate Course		3
Geography Elective		3
Geography Elective		3
General Education Course		3
Credits		15
Total Credits		121