

Geography Programs

B.S. Geography Program [Major #674, with Minor] (36 hours)

Karst Geoscience Concentration

Foundation Requirements	(13 hours):
GEOG 100 or GEOL 102 or GEOL 111 Earth Science	3 hours
GEOG 110 World Regional Geography	3 hours
GEOG 280 Introduction to Environmental Science	3 hours
GEOG 475 Mammoth Cave Summer Course	3 hours
GEOG 499 Professional Development	1 hour

Technique Requirements	(10 hours):
GEOG 300 Research Methods	3 hours
GEOG 316 Fundamentals of GIS	4 hours
GEOG 391 Data Analysis	3 hours

Thematic Requirements	(9-10 hours):
GEOG or GEOL 310 Global Hydrology	3 hours
or GEOG 459 Physical Hydrology	3 hours
GEOG 461 Karst Environments	3 hours
GEOG or GEOL 420 Geomorphology	4 hours
or GEOG 475 Mammoth Cave Karst	3 hours

General Electives	(3-4 hours):
GEOG 208 Floods and Droughts	1 hour
GEOG 209 Natural Disasters	1 hour
GEOG 317 GIS	4 hours
GEOG 414 Remote Sensing	4 hours
GEOG 417 GIS Analysis	3 hours
GEOG 419 GIS Programming	3 hours
GEOG 444 Environmental Ethics	3 hours
GEOG 452 Field Methods	3 hours
GEOG 455 Global Environmental Change	3 hours
GEOG 471 Natural Resource Management	3 hours
GEOG 474 Environmental Planning	3 hours
GEOG 487 Environmental Law and Policy	3 hours
GEOL 415 Environmental Geology	3 hours
GEOL 445 Aqueous Geochemistry	3 hours

Additional Program Requirements (not included in the 36-hour program) (11-12 hours):

- MATH 136 Calculus 1 4 hours
- CHEM 120 Chemistry I 4 hours
- PHYS 201 College Physics I 4 hours
- or BIOL 120 Biological Concepts 3 hours

Cultural Geography Concentration

Foundation Requirements	(14 hours):
GEOG 100 or GEOL 102 or GEOL 111 Earth Science	3 hours
GEOG 110 World Regional Geography	3 hours
GEOG 330 Introduction to Cultural Geography	3 hours
GEOG 430 Topics in Cultural Geography	3 hours
GEOG 475 or 495 Practicum or Internship	1 hour
GEOG 499 Professional Development	1 hour

Technique Requirements	(10 hours):
GEOG 300 Research Methods	3 hours
GEOG 316 Fundamentals of GIS	4 hours
GEOG 391 Data Analysis	3 hours

Thematic Requirements	(6 hours):
Choose two courses from:	
GEOG 350 Economic Geography	3 hours
GEOG 378 Food and Culture	3 hours
GEOG 480 Urban Geography	3 hours
GEOG 481 Tourism Geography	3 hours

Regional Requirements	(6 hours):
Choose two courses from:	
GEOG 200 Latin America	3 hours
GEOG 360 North America	3 hours
GEOG 451 Kentucky	3 hours
GEOG 454 Middle America	3 hours
GEOG 462 South America	3 hours
GEOG 464 Europe	3 hours
GEOG 465 Asia	3 hours
GEOG 466 Africa	3 hours
GEOG 467 Middle East	3 hours

Additional Program Requirements (not included in the 36-hour program) (5-6 hours):

- MATH 118 Algebra and Trigonometry 5 hours
- or MATH 116 Algebra 3 hours
and MATH 117 Trigonometry 3 hours

Environmental Planning and Resource Management Concentration

Foundation Requirements	(13 hours):
GEOG 100 or GEOL 102 or GEOL 111 Earth Science	3 hours
GEOG 110 World Regional Geography	3 hours
GEOG 280 Introduction to Environmental Science	3 hours
GEOG 475 or 495 Practicum or Internship	3 hours
GEOG 499 Professional Development	1 hour

Technique Requirements	(10 hours):
GEOG 300 Research Methods	3 hours
GEOG 316 Fundamentals of GIS	4 hours
GEOG 391 Data Analysis	3 hours

Thematic Requirements	(9 hours):
GEOG 328 Biogeography	3 hours
GEOG 471 Natural Resource Management	3 hours
GEOG 474 Environmental Planning	3 hours

General Electives	(4 hours):
GEOG 208 Floods and Droughts	1 hour
GEOG 209 Natural Disasters	1 hour
GEOG or GEOL 310 Global Hydrology	3 hours
GEOG 317 GIS	4 hours
GEOG 350 Economic Geography	3 hours
GEOG 380 Global Sustainability	3 hours
GEOG 414 Remote Sensing	4 hours
GEOG 417 GIS Analysis	3 hours
GEOG 419 GIS Programming	3 hours
GEOG 444 Environmental Ethics	3 hours
GEOG 452 Field Methods	3 hours
GEOG 455 Global Environmental Change	3 hours
GEOG 459 Physical Hydrology	3 hours
GEOG 461 Karst Environments	3 hours
GEOG 487 Environmental Law and Policy	3 hours
GEOL 415 Environmental Geology	3 hours

Additional Program Requirements (not included in the 36-hour program) (8-9 hours):

- MATH 118 Algebra and Trigonometry 5 hours
- or MATH 116 Algebra 3 hours
and MATH 117 Trigonometry 3 hours
- Either PHIL 320 Ethics 3 hours
or GEOG 444 Environmental Ethics 3 hours

Land, Weather, Climate Concentration

Foundation Requirements	(13 hours):
GEOG 100 or GEOL 102 or GEOL 111 Earth Science	3 hours
GEOG 110 World Regional Geography	3 hours
GEOG 121 Introduction to Meteorology	3 hours
GEOG 475 or 495 Practicum or Internship	3 hours
GEOG 499 Professional Development	1 hour

Technique Requirements	(10 hours):
GEOG 300 Research Methods	3 hours
GEOG 316 Fundamentals of GIS	4 hours
GEOG 391 Data Analysis	3 hours

Thematic Requirements	(7 hours):
GEOG 322 Global Climate Systems	4 hours

GEOG 424 Weather Analysis and Forecasting	3 hours
or	
GEOG 426 Applied Meteorology	3 hours

General Electives	(6 hours):
GEOG 122 Aviation Meteorology	3 hours
GEOG 222 Observational Meteorology	3 hours
GEOG or GEOL 310 Global Hydrology	3 hours
GEOG 325 Meteorological Instrumentation	3 hours
GEOG 328 Biogeography	3 hours
GEOG 414 Remote Sensing Fundamentals	4 hours
GEOG or GEOL 420 Geomorphology	4 hours
GEOG 424 Weather Analysis and Forecasting	3 hours
GEOG 426 Applied Meteorology	3 hours
GEOG 455 Global Environmental Change	3 hours
GEOG 459 Physical Hydrology	3 hours
GEOG 461 Karst Environments	3 hours
GEOG 471 Natural Resource Management	3 hours
GEOL 311 Oceanography	3 hours
GEOL 325 Rocks and Minerals	3 hours

Additional Program Requirements (not included in the 36-hour program) (9-10 hours):

- **MATH 116 Algebra** **3 hours**
- **MATH 117 Trigonometry** **3 hours**
or **MATH 118 College Algebra and Trigonometry** **5 hours**
- **PHYS 201 College Physics I** **4 hours**

Planning and G.I.S. Concentration

Foundation Requirements	(13 hours):
GEOG 100 or GEOL 102 or GEOL 111 Earth Science	3 hours
GEOG 110 World Regional Geography	3 hours
GEOG 240 Introduction to Planning	3 hours
GEOG 475 or 495 Practicum or Internship	3 hours
GEOG 499 Professional Development	1 hour

Technique Requirements	(10 hours):
GEOG 300 Research Methods	3 hours
GEOG 316 Fundamentals of GIS	4 hours
GEOG 391 Data Analysis	3 hours

Thematic Requirements	(10 hours):
GEOG 317 GIS	4 hours
GEOG 474 Environmental Planning	3 hours
GEOG 484 Advanced Planning	3 hours

General Electives	(3 hours):
GEOG 350 Economic Geography	3 hours
GEOG 360 North America	3 hours
GEOG 414 Remote Sensing Fundamentals	4 hours
GEOG 417 GIS Analysis	3 hours
GEOG 419 GIS Programming	3 hours

GEOG 423 Transportation Planning	3 hours
GEOG 451 Kentucky	3 hours
GEOG 477 Special Topics in GIS	3 hours
GEOG 480 Urban Geography	3 hours
GEOG 487 Environmental Law and Policy	3 hours
GEOG 488 Rural Planning	3 hours
GEOG 497 Spatial Decision Support Systems	3 hours

Additional Program Requirements (not included in the 36-hour program) (11-12 hours):

- **MATH 116 Algebra** 3 hours
- **MATH 117 Trigonometry** 3 hours
- **or MATH 118 College Algebra and Trigonometry** 5 hours
- **AMS 163 Autocad** 3 hours
- **CIS/CS 226 Visual Programming** 3 hours
- **or CS 230 Introduction to Programming** 3 hours

HONORS IN GEOGRAPHY Concentration

- **Program Requirements 30 hours**
GEOG 100 (Honors), 110 (Honors), 300, 316, 391, HONS 300, HONS 301, HEEC courses (10 hours), 499
- **Program Electives 6 hours**
HONS 403 Thesis for 6 hours, or 475 or 495
- **Program Total 36 hours**

Additional requirements: MATH 118 (or MATH 116 and MATH 117) and one Ethics course: PHIL 320 or GEOG 444