

## Geography Programs

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

<b>Foundation Requirements</b>	<b>(13 hours):</b>
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

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

<b>Thematic Requirements</b>	<b>(9-10 hours):</b>
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

<b>General Electives</b>	<b>(3-4 hours):</b>
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

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

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

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

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

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

- **MATH 116 Algebra** 3 hours
  - **MATH 183 Statistics** 3 hours
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## Environmental Planning and Resource Management Concentration

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

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

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

<b>General Electives</b>	<b>(4 hours):</b>
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) (9 hours):**

- MATH 116 Algebra 3 hours
- MATH 183 Statistics 3 hours
- Either PHIL 320 Ethics 3 hours  
or GEOG 444 Environmental Ethics 3 hours

## **Land, Weather, Climate Concentration**

<b>Foundation Requirements</b>	<b>(13 hours):</b>
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

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

<b>Thematic Requirements</b>	<b>(7 hours):</b>
<b>GEOG 322 Global Climate Systems</b>	<b>4 hours</b>
<b>GEOG 424 Weather Analysis and Forecasting</b>	<b>3 hours</b>
or	
<b>GEOG 426 Applied Meteorology</b>	<b>3 hours</b>

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

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

- **MATH 116 Algebra** 3 hours
- **MATH 183 Statistics** 3 hours
- **PHYS 201 College Physics I** 4 hours

## **Planning and G.I.S. Concentration**

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

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

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

<b>General Electives</b>	<b>(3 hours):</b>
<b>GEOG 350 Economic Geography</b>	<b>3 hours</b>
<b>GEOG 360 North America</b>	<b>3 hours</b>
<b>GEOG 414 Remote Sensing Fundamentals</b>	<b>4 hours</b>
<b>GEOG 417 GIS Analysis</b>	<b>3 hours</b>

<b>GEOG 419 GIS Programming</b>	<b>3 hours</b>
<b>GEOG 423 Transportation Planning</b>	<b>3 hours</b>
<b>GEOG 451 Kentucky</b>	<b>3 hours</b>
<b>GEOG 477 Special Topics in GIS</b>	<b>3 hours</b>
<b>GEOG 480 Urban Geography</b>	<b>3 hours</b>
<b>GEOG 487 Environmental Law and Policy</b>	<b>3 hours</b>
<b>GEOG 488 Rural Planning</b>	<b>3 hours</b>
<b>GEOG 497 Spatial Decision Support Systems</b>	<b>3 hours</b>

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

- **MATH 116 Algebra** 3 hours
- **MATH 183 Statistics** 3 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 116 and MATH 183, and one Ethics course: PHIL 320 or GEOG 444**

**Effective for Students declaring the major in Fall 2012 or thereafter.**

**Updated 4/18/2012**