

BA in Geography with Emphasis in Geographic Information Sciences

Degree Program Description

Geographers are interested in a wide range of topics and often work in interdisciplinary teams that analyze challenges like environmental change, resource use, and economic issues in an increasingly interdependent world. The study of Geographic Information Systems trains students to address the variety of technologies revolutionizing geographic analysis such as GIS, Global Positioning Systems, remote sensing, computer assisted cartography and spatial statistics. Geography prepares students for a variety of professions including careers in environmental impact assessment, mapping, remote sensing, geographic information analysis, government service, military intelligence, as well as education. Geographers are interested in a wide range of topics and often work in interdisciplinary teams that analyze challenges like environmental change, resource use, and economic issues in an increasingly interdependent world. Geography majors receive marketable skills during their undergraduate experience. Recent graduates work for companies such as ESRI and Garmin. MU geography graduates have also found employment with government agencies, including the National Park Service, National Geospatial-Intelligence Agency, U.S. Geological Survey, Missouri Department of Natural Resources, and Missouri Department of Transportation.

Major Program Requirements

The study of GIS prepares students to address the variety of technologies revolutionizing geographic analysis such as GIS, Global Positioning Systems, remote sensing, computer assisted cartography and spatial statistics. Students are required to take three courses (normally nine hours) in the emphasis. Two additional courses (six additional hours) are selected from a secondary emphasis area.

In addition, students must complete all College of Arts and Science and University graduation requirements (<http://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), including University general education (<http://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>).

GEOG 3040	Introduction to Geographic Information Systems GIS	3
GEOG 3830	Remote Sensing	3
GEOG 4130	The Geospatial Sciences in National Security	3
GEOG 4710	Spatial Analysis in Geography	3
GEOG 4740	Location Analysis and Site Selection	3
GEOG 4790	Geographic Information Systems for the Social Sciences	3
GEOG 4810	Landscape Ecology and GIS Analysis I	3
GEOG 4860	Advanced Remote Sensing	3
GEOG 4940	Advanced Geographic Information Systems (GIS II)	3

Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available.

First Year			
Fall	CR	Spring	CR
ENGLISH 1000*		3 MATH 1100*	3
GEOG 1100*		4 GEOG 2610	3
GEOG 1100		3 Second language II**1	4-6
Second language I**1		4-6 Elective/minor course	3
			14-16
			13-15

Second Year			
Fall	CR	Spring	CR
Second language III*		3 Behavioral Science Course*	3
Social Science Course (MO State Law)*		3 Behavioral Science Course*	3
Elective/Minor Course		3 Writing Intensive Course*	3
GEOG 1800		3 GEOG 1550	3
3000+ level Geog emphasis course		3 GEOG 3840 or 3040	3
			15
			15

Third Year			
Fall	CR	Spring	CR
Biological/Physical Science Course*1		3 Humanities/Fine Arts Course*	3
Social Science Course (2000+)		3 3000+ level Geog emphasis course	3
3000+ level Geog emphasis course		3 Social Science Course (2000+)*	3
3000+ level Geog emphasis course		3 Humanities/Fine Arts Course (2000+)*	3
Social Science Course*		3 Biological/Physical Science Course with Lab	3-5
		Elective/Minor Course (3000+)	
			15
			15-17

Fourth Year			
Fall	CR	Spring	CR
Humanities/Fine Arts Course*		3 GEOG 4990	3
STAT 1200 or 1300		3 3000+ level Geog emphasis course*1	3
3000+ level Geog emphasis course		3 Elective/Minor Course	3
Elective/Minor Course (3000+)		3 Humanities/Fine Arts Course (2000+)*	3
Elective/Minor Course		3 Elective/Minor Course (3000+)	3
			15
			15

Total Credits: 117-123

Requires 120 credits for graduation.

* Denotes General Education and A&S Foundation Requirements

1 Denotes Degree Program Requirements