

# Certificate in Geographical Information Science - Interdisciplinary

GEOG 3385	Special Problems in Geography
NAT_R 4001	Topics in Natural Resources

This certificate is designed to provide students with the theoretical, practical and technical skills that are essential for the analysis of spatial data. Students from a wide range of disciplines will benefit by becoming proficient in the use and application of GIS technologies through a flexible set of courses and hands-on experiences. The program offers the training and experience necessary to prepare for the rapidly expanding professional opportunities available in the diverse set of fields that depend on geographic information.

## Requirements

A student must complete a minimum of 15 hours of approved coursework, and must earn a grade average of at least B (3.0) in these courses.

A certificate consists of at least 12 credits; at least 12 credits must be taken in MU course work. Students must meet the minimum GPA requirements for a certificate, which in no case can be lower than 2.0. In addition, a student cannot receive a grade lower than a C- in any course applied towards a certificate in the College. For more information, please see Requirements for an Optional Certificate (<http://catalog.missouri.edu/collegeofartsandscience/#requirementsforanoptionalcertificate>).

### Group A (Foundation courses, one from this group)

GEOG 3040	Introduction to Geographic Information Systems GIS
NAT_R 2325	Introduction to Geographic Information Systems

### Group B (Theoretical Breadth courses, at least one from this group)

GEOG 4710	Spatial Analysis in Geography
FOREST 4360	Forest Measurements
GEOG 4810/ NAT_R 4385	Landscape Ecology and GIS Analysis I
GEOG 3840	Cartography
GEOG 3830	Remote Sensing
GEOG 4740	Location Analysis and Site Selection
GEOG 4790	Geographic Information Systems for the Social Sciences

### Group C (Technical Breadth and Application courses, at least one from this group)

GEOG 4940	Advanced Geographic Information Systems (GIS II)
BIOL_EN 4350/ CV_ENG 4720	Watershed Modeling Using GIS
NAT_R 4365	GIS Applications
GEOG 4130	The Geospatial Sciences in National Security
GEOG 4850	Transportation Geography
GEOG 4860	Advanced Remote Sensing
ATM_SC 4510	Remote Sensing for Meteorology and Natural Resources

### Capstone experience (or substitute 1 additional course from above)