Faculty

Sagy Cohen, Ph.D.
Associate Professor: GIS, remote sensing, environmental modeling.

Kevin Curtin, Ph.D.
Professor, GIS, data modeling and database design, location science, networks.

Johanna Engström, Ph.D.
Geospatial Services Manager: GIS, renewable energy, hydroclimatology.

Matthew LaFevor, Ph.D.
Assistant Professor: GIS, water management, field techniques, agro-ecology.

Hongxing Liu, Ph.D.
Professor: remote sensing, GIS sensor networks, environmental modeling.

W. Craig Remington, M.S.
Adjunct Professor and Director of Cartographic Research Lab: GIS, cartography.

Joe Weber, Ph.D., GISP
Professor: GIS, transportation, national parks.

Admission

The courses in the GIS Certificate Program can either be taken at the undergraduate or graduate level.

To pursue the undergraduate-level GIS certificate students must be currently enrolled at the University of Alabama or another four-year college or university or have two years of work experience in a field that deals with geographic information, such as geography, natural resources and land-use management, environmental analysis, regional and environmental planning, civil engineering, or business applications.

The requirement for the graduate-level GIS certificate is a bachelor degree in one of the above fields.

For more information contact:

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THE UNIVERSITY OF ALABAMA®
The objectives of the certificate in GIS are to provide participants with a concentrated geography background focusing on geographic information techniques, to prepare participants with technical skills in using GIS, and to qualify participants for applications of GIS in various areas.

**Required courses (12 hours):**
- GY 330 Computer Mapping and Graphics ............ 4 hours
- GY 420/520 Remote Sensing I .......................... 4 hours
- GY 430/530 Introduction to GIS ........................ 4 hours

**Electives (8 hours):**
- GY 432/532 GIS Programming .......................... 4 hours
- GY 433/576 GIS Practicum ............................... up to 4 hours
- GY 435/535 Remote Sensing II .......................... 4 hours
- GY 436/536 Advanced GIS ................................ 4 hours
- GY 437/537 GIS for Transportation .................... 4 hours
- GY 438/538 Applications of GIS ......................... 4 hours
- GY 443/543 Location Science ............................ 3 hours

Prerequisites or permission to register may apply.

**Facilities and Resources:**
The Geography Department houses:
- The GIS and Remote Sensing Laboratory, a state-of-the-art computing facility serving students.
- The Cartographic Research Laboratory, a self-supporting, non-profit facility, receiving funding through the sale of publications and through the completion of cartographic and GIS projects.
- The Map Library, a regional depository for the U.S. Federal Government and one of the largest map collections in the country.
- The Surface Dynamics Modeling Lab (SDML), which studies planetary surface processes and dynamics.
- The Laboratory for Location Science, which brings GIS and Operations Research together to solve optimal facility location problems.

The Geography Department is a member of the University Consortium for GIS (UCGIS), USGS/NGA Center of Excellence in Geospatial Sciences and the UN Global Geospatial Information Management Academic Network of Americas.

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"Knowing where things are, and why, is essential to rational decision making."

- Jack Dangermond, Environmental Systems Research Institute (ESRI)