

GISc

Certificate (Online)

The Geography Department offers a graduate certificate in Geographic Information Science (GISc). GISc is the foundation of Geographic Information Systems (GIS), which integrate spatial data sets in the form of digital maps, digital aerial photos, remotely sensed imagery, and global positioning system (GPS) coordinates. GIS technology is used to assess, manage and plan many facets of society including air and water resources, population growth, natural resource management, economic development, business marketing and site location, city planning, building design and urban infrastructure.

This one year program addresses the demand for GIS education, training and technology transfer among students and working professionals. It specifically addresses issues of formal GIS education (basic knowledge and theory) and hands-on training and exposure to technology (GIS technical training).

The goal of GISc is to model landscapes digitally and to enable the mathematical characterization of spatial and temporal processes. The Certificate in Geographic Information Science students must be admitted to UND as either full- or part-time graduate students. Application for admission must be made to the UND Graduate School. The certificate is designed to serve: a) non-geography graduate students currently pursuing a graduate degree from UND, and b) non-degree-seeking professionals already holding graduate and/or baccalaureate degrees who seek to “re-tool.”

Admission Requirements

1. A baccalaureate degree from an accredited university.
2. A GPA of at least 2.75 in all undergraduate work.

Degree Requirements

Successful completion of the 12-credit GISc Certificate requires the following:

1. Completion of the nine credits of core courses (see below).
2. Completion of at least three credit hours of elective courses (see below).
3. A “B” grade or better in all core and elective courses.
4. Completion time of no more than five years.

Please consult the Academic Catalog for a list of required and elective courses.

Faculty and Areas of Expertise

- **Devon A. Hansen, Ph.D.**, migration, population, gender issues, community development, Great Plains
- **Douglas C. Munski, Ph.D.**, historical, geographic education, tourism, Canada, North America
- **Bradley C. Rundquist, Ph.D.**, remote sensing, digital image processing, geographic information systems, biogeography
- **Paul E. Todhunter, Ph.D., Chair**, climatology, hydrology, natural hazards, human impacts
- **Gregory S. Vandenberg, PhD**, fluvial and glacial geomorphology, heavy metals in the environment, disturbed land reclamation, geographic information systems, remote sensing
- **Enru Wang, Ph.D.**, economic, regional development, urban, China, GIS

Contact Information

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GIS Certificate

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Apply ONLINE:
<http://graduateschool.und.edu>

Online Option

This graduate program is also available online. In-state tuition is available for all distance programs regardless of your residency status. For complete details about online and distance programs at UND, including curriculum, how distance programs work, and technical requirements, please visit: www.distance.und.edu.

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