GISc Graduate Certificate (CTGISG)

Geographic Information Science (GIS) is an important synthesis of traditional mapping with more advanced tools of data modeling and analysis to provide new and enhanced information on geospatial topics. The power of GIS is the use of spatial analysis techniques to analyze geographic information. The GIS certificate offers non-geography students an opportunity to gain the knowledge, theory, and training to use GIS as a tool to answer research questions relevant to their disciplines. This graduate certificate program offers a balance of theory and technical training in Geographic Information Science. The certificate program is designed to accommodate both degree and non-degree seeking students. Students currently enrolled in a graduate degree program can add the certificate program by completing an Application for Update of Program(s), available at the Graduate College office. Students not currently enrolled in a graduate degree program must complete a non-degree application as described in the Graduate Catalog.

Complete a minimum of **15 credit hours** including:

**Core Course (4 credits)**

GEOG 5730 Principles of GIS

**Supporting courses (choose two, 8 credits)**

GEOG 5600 Cartography I  
GEOG 5660 Remote Sensing  
GEOG 5740 Application Development in GISc  
GEOG 5760 Geographic Information Analysis

**Elective (choose one, 3-5 credits)**

BIOS 6700 Biostatistics I (3)  
CS 5440 Data Communications (3)  
EE 6643 Digital Image Processing (3)  
GEOL 5050 Modeling and Computational Methods in Geology (5)  
HLTH 6040 Research and Quantitative Methods for Health Services (3)  
P BIO 5150 Quantitative Methods in Plant Biology (4)  
SOC 5500 Data Analysis (3)