Undergraduate Certificate in Geographic Information Science

“Everything is related to everything else, but near things are more related than distant things,” said renowned geographer and cartographer Waldo Tobler. A certificate in Geographic Information Science (GIS) capitalizes on this by blending field equipment, computer hardware and software, data, and people to capture, manage, display, analyze, and distribute all forms of geographically referenced information. Through the application of GIS and its principles, you can perform quantitative analyses to make informed decisions and provide logistical support in virtually any field. Effective use of GIS has evolved into a requisite skill for most agencies in both the public and private sectors, and provides a transformative tool to address academic research. Students from such diverse disciplines as geography, atmospheric science, biology, engineering, economics, urban planning, landscape architecture, and sociology benefit from applying GIS and related technologies such as global positioning systems (GPS), remote sensing, spatial statistics, and computer programming to use location-based data. GIS has found wide applications in the sciences and engineering, as well as in business, government, military, and consumer areas. The director of the certificate program is available to meet with each student and design a curriculum that best meets your interests, goals, and academic level.

The certificate program is designed to provide undergraduate students with the knowledge and skills necessary to succeed in the rapidly expanding field of geographic information science (GIScience) or apply GIScience concepts in their own fields of study. A certificate in GIS shows employers you have the critical skills necessary to perform in public, private, and academic settings.

Students interested in pursuing the certificate should review the requirements and meet with Undergraduate Academic Advisor Lisa Hamblen at lhamblen@ku.edu, or the GIS program director, Professor Xingong Li at lixi@ku.edu. The University of Kansas is a member of University Consortium for Geographic Information Science (UCGIS).

General requirements:

Students must maintain a 2.5 GPA in courses taken in the certificate program. A student pursuing the certificate can take no longer than 7 years to pursue the certificate unless a leave of absence or other extenuating circumstances are present.

Course requirements:

To complete the certificate, 14 credit hours must be completed within 7 academic years. Among them 8 credit hours are from two required core GIS courses and additional 6 credit hours are from electives. Only one course outside of the department can be included in these 14 credit hours.

Courses may be waived in consultation with the Director if the student can demonstrate satisfactory completion of similar coursework. If transfer courses are to be used to meet program requirements, the student must furnish the program director with a certified university transcript and, in some instances, a copy of the class syllabus. A maximum of 6 transfer credit hours may be used to meet program requirements.