GEOGRAPHIC INFORMATION SCIENCE (GISC)

GISC 340 Remote Sensing 4 Credit Hours
This course introduces students to the basics of remote sensing, characteristics of remote sensors, and remote sensing applications in academic disciplines and professional industries. Students will explore the physical and mathematical principles underlying remote sensing techniques, and will practice the acquisition, processing, and visualization of remotely derived data. This course emphasizes hands-on learning through projects. (W, YR).
Restriction(s):
Can enroll if Class is Junior or Senior or Graduate

GISC 385 GIS Internship 1 to 3 Credit Hours
A field assignment relating to the student's GIS interests. The student will work in an off-campus government or private business for a prescribed number of hours each week to be arranged by the advisor and employer. May be repeated up to two times. Written permission of instructor. (F, W, S, YR). (F, W, S, YR).
Restriction(s):
Can enroll if Class is Junior or Senior or Graduate

GISC 440 Advanced GIS 4 Credit Hours
This course offers an opportunity for students with a background in the fundamentals of geographic information systems (GIS) to apply the analytical capabilities of geospatial technology to model real-world situations in support of decision making. Particular emphasis is given to data development and management, spatial and statistical analyses, customization, and effective visualization. (W, YR).
Prerequisite(s): GEOL 305 or ESCI 305 or GEOG 305

GISC 485 Spatial Analysis and GIS 4 Credit Hours
The statistical methods behind analyzing spatial datasets is covered in detail, with a strong emphasis on environmental sciences and human populations. This course complements courses in remote sensing, geographic information systems, and geographic principles and is designed to quantitatively evaluate the relationships between objects and their surroundings. (AY).
Prerequisite(s): GEOL 305 or ESCI 305 or GEOL 340 or ENST 340 or GEOG 302 or GEOG 202 or GEOG 305
Restriction(s):
Can enroll if College is Engineering and Computer Science or Education, Health, and Human Services or Business or Arts, Sciences, and Letters

*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally