Geographic Information Systems

Geographic Information Systems (GIS) is a computerized system used to design, capture, store, manipulate, analyze, manage, and present geographically referenced information or data. GIS combines cartography, statistical analysis, and databases to manipulate spatial areas for a given application.

Program Admission Requirements:

Qualified for ENG 100.

Program Student Learning Outcomes (PSLOs) approved 10/17/2013:

1. Apply acquired knowledge and skills, incorporating geographic perspectives into their major fields of specialization.
2. Critically analyze the specific advancements of geographical representation, and support geographic decisions and the furthering of geographic scientific and technological knowledge, especially related to the presentation of geographic mapping across cultures and through time, and assessing theories and assumptions about mapping and decision-making that relate to the student's particular academic focus.
3. Analyze and describe contemporary and interdisciplinary geographical representation, with a focus on social and environmental management issues.
4. Illustrate critical thinking skills in decision-making that reflect ethical and professional understandings of geographic mapping.
5. Describe and analyze the politics and influences of geographical representation.
6. Construct maps utilizing digital techniques, computer assisted design (CAD), database development, and map design.
7. Communicate successfully orally and in writing in Standard American English, and interpret, and/or express themselves in, some other form of communication at a basic level, whether from knowledge of a second language or through artistic or symbolic expression.
8. Analyze and demonstrate quantitative methods appropriately, based upon a scientific understanding of the physical and natural world, and an understanding of the mathematics of digitized geographical representation.