Geographic Information Systems

Required Courses

Why Choose Geographic Information Systems Certificate?

A Geographic Information System uses computers and software to leverage the fundamental principle of spatial data and information management. It is a tool used for managing information according to where it is located. There is currently a shortage of qualified professionals to fill GIS related positions in diverse disciplines ranging from different levels of government to various private companies to large corporations. GIS is one of the most important components in approaching global problem solving. It helps us look for patterns in both the man-made and natural worlds. People in business, government, education, and natural resources are using GIS to analyze markets, manage parcels of land, conduct research, and protect natural resources.

What is GIS?

Geographic Information Systems (GIS) is a computerized method for displaying spatial data. This means that information about the world is stored in a database and can be viewed on a map. The information can be just about anything. Take your house as an example. There are a lot of different kinds of information you can collect about your house - price, size, number of bedrooms, the year it was built. All of this information can be stored in a table created in a program like MS Excel. This database is the beginning of an Information System. Your house also has an address. The address is a type of geographic information. You put the two kinds of data together - information + geographic and you have GIS. You can see where the house is located and you can see information about the house.

Why should I take a GIS class?

GIS is a multidisciplinary discipline that relates to applications in various other fields. GIS can help deal with complex issues by modeling the earth and developing generalizations about how it functions. It can also be used in a variety of ways for any endeavor linking information to features on the ground.

What is the employment outlook for the GIS industry?

The growth of GIS applications in desktop computing is expanding exponentially, creating new and exciting developments. GIS technology represents a billion dollar industry worldwide, growing 25% per year and serving 50,000 to 100,000 users in more than 100 countries. At this time, job opportunities outnumber qualified graduates. There will continue to be a need for GIS professionals to deal with newer and tougher air and water regulations, as well as civil engineers to rebuild the nation's infrastructure. Look at this site to see the type of jobs offered and qualifications desired by employers.
Admission Requirements:
Must meet general admission criteria to University or permission of department.

Graduation Requirements
A minimum of 50% of the total credits required must be earned at Ferris State University.
A minimum grade of C- is required for each course in certificate.
Cumulative GPA must be a 2.0 or higher.

More Information
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ADA compliant checksheets are being developed for the 2019-2020 Catalog. If you would like to request an ADA compliant checksheet before the 19-20 catalog is published, please send your request to: FSUCurriculum@ferris.edu