

Geographic Information Systems Certificate of Completion

PROGRAM DESCRIPTION

The GIS certificate program is designed for students already possessing a two- or four-year college degree that seek to add specific GIS skills to their discipline.

GIS is an information system designed to work with data referenced by spatial or geographic coordinates. GIS is both a database system with specific capabilities for spatially referenced data, as well as a set of operations for working with (analyzing) the data. The program is built on a foundation of computer-aided mapping and surveying technology for collecting spatial data, database generation and manipulation for tabular data and GIS-specific courses for organization, analysis and reporting. Graduates work in retail and commercial businesses, natural resources, education, federal/state/local governments, banking and insurance, internet, publishing and real estate. GIS careers typically include positions such as GIS technician, analyst, project manager, computer programmer, database administrator, system administrator, cartographic designer, developer and related managerial and administrative roles.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs

- Required:
 - Materials (usb/flash drive, maps, assorted office supplies), \$500.
- Recommended:
 - A home or laptop computer capable of running the GIS software, \$700. Contact program instructor for specifics.

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements

Recommended:

- Two year, four-year, or graduate degree from accredited institution
- Completion of computer competency (either IC3 exam or CIS 120 Computer Concepts)

PROGRAM PERFORMANCE STANDARDS

Academic Requirements

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4

GEOG 266	Arc GIS	5
GEOG 267	Geodatabase Design	5
GEOG 273	Spatial Data Collection	5
GEOG 275	GIS Capstone	5
GEOG 285	Data Conversion/Documentation	5
GEOG 286	Remote Sensing	5
GEOG 287	Analysis of Spatial Data	5

Other Required Courses

Human Relations approved course	3
WR 121 Academic Composition	4

Total Credits 50

ADVISING NOTES

Program (GIS) courses begin once per year, in fall term. Students take non-program support and/or selected GIS courses if they begin in a term other than fall or if they need to build skills related to prerequisites. Students receiving federal financial aid are encouraged to speak with the financial aid advisor.

GIS courses, offered each term, must be taken together and sequentially. Students are discouraged from working more than 10 hours per week during any term due to heavy course load.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.