

GIS

Associate of Applied Science in Geographic Information Systems–GIS2

Geographic Information Systems is a rapidly expanding technology integral to nearly every industry, business and government service. GIS is used to map, manage, manipulate, maintain and model data. GIS is used by cities to keep track of roads, parcels and utilities, farmers to precisely determine and control treatment coverage on their fields, emergency personnel to help respond more quickly and effectively to events by people in the health care industry, mining, forestry, real estate, web, government, engineering, natural resources, transportation, and utilities industries to solve their need to manage location based information.

In 2003, President Bush introduced the High Growth Job Training Initiative, a collaborative effort to help team people with the jobs that are needed. The initiative is a strategic effort to prepare workers to take advantage of new and increasing job opportunities in high-growth, high-demand, and economically vital sectors of the American economy. The High Growth Job Training Initiative identified the geospatial industry as one of fourteen that is projected to have far reaching impact on the U.S. economy. Due in part to the fact that geospatial technology uses are so widespread and diverse, the geospatial market is growing at an annual rate of almost 35%, with the commercial sub-section expanding at a rate of 100% per year. This extraordinary growth is due to many factors, including the sector's emerging importance and application in national, economic and homeland security interests. The future of the industry is boundless, as more and more organizations discover the powerful benefits that can be realized through the use of this high-tech, cutting-edge technology.

FIRST SEMESTER	SCH
— COSC 1301 Microcomputer Applications	3
— GISC 1311 Introduction to Geographic Information System	3
— ENGL 1301 English Composition I	3
— ---- ---- Natural Science	4
— GISC 2311 Geographic Information Systems (GIS) Applications	3
	16

SECOND SEMESTER	SCH
— ITSW 2337 Advanced Database	3
— GISC 1321 Introduction to Raster-Based GIS	3
— COSC 1436 Programming Fundamentals I	4
— GISC 1391 Special Topics in Cartography	3
— ---- ---- Humanities/Fine Arts	3
	16

THIRD SEMESTER	SCH
— MATH 1414 College Algebra	4
— SPCH 1315 Principles of Public Speaking	3
— GISC 2303 Fundamentals of Logistics with GIS	3
— SOCI 2319 Multi-Cultural Studies	3
— ENGL 2311 Technical Writing	3
	16

FOURTH SEMESTER	SCH
— GISC 2402 GIS Design with Raster Analysis	4
— MATH 2442 Elementary Statistics	4
— GISC 2320 Intermediate Geographic Information Systems (GIS)	4
— GISC 2301 Data Acquisition & Analysis in GIS	3
—●GISC 2359 Web-Served GIS	
or	
—●GISC 2380 Cooperative Education: Cartography	3
	17
Total Semester Credit Hours for Degree	65

Certificate of Completion in Geographic Information Systems Technician–GIST1

FIRST SEMESTER	SCH
— GISC 1311 Introduction to Geographic Information System	3
— GISC 2311 Geographic Information Systems (GIS) Applications	3
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SECOND SEMESTER	SCH
— GISC 1321 Introduction to Raster-Based GIS	3
— GISC 2301 Data Acquisition & Analysis in GIS	3
—●GISC 1391 Special Topics in Cartography	3
	9
Total Semester Credit Hours for Certificate	15

Certificate of Completion in GIS/GPS Analyst–GIS1

FIRST SEMESTER	SCH
— GISC 1311 Introduction to Geographic Information System	3
— GISC 2311 Geographic Information Systems (GIS) Applications	3
— GISC 2303 Fundamentals of Logistics with GIS	3
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SECOND SEMESTER	SCH
— GISC 1321 Introduction to Raster-Based GIS	3
— GISC 2301 Data Acquisition & Analysis in GIS	3
—●GISC 1391 Special Topics in Cartography	3
— GISC 2402 GIS Design with Raster Analysis	4
— GISC 2320 Intermediate Geographic Information Systems (GIS)	3
	16
Total Semester Credit Hours for Certificate	25