

# Geographic Information Systems

2018-2019 Catalog

Award Granted Upon Completion: Associate in Applied Science

Credits/Contacts Required: 61/63

Major code: 03/353

CIP Code: 151102

## Description

Geospatial studies encompasses several learning domains including geography (study of the features of the earth) and geodesy (study of the measurement and representation of the earth), and its uses with cartography, geographic information systems, and geospatial analysis to solve problems in a variety of disciplines ranging from life sciences to military to health care fields. Computer and mobile application-based tools such as spatial analysis, 3D mapping, and geovisualization make this career both engaging and challenging.

### General Education Requirements – Min 17 credits

		<u>Cr</u>
ENGL-101	Rhetoric & Composition	3
MATH-xxx	Mathematics Elective	4
	MATH-105, 107, or higher	
GEOG-110	Physical Geography	4
GEOG-125	World Regional Geography	
	Developed World	3
XXXX-xxx	Social and Behavioral Science or Humanities	3

### Program Requirements (Minimum 44)

BIOL-107	Environmental Science	3
CIS-101	Computer Concepts & Applications	4
CIS-210	Web Page Design & Structure	3
CNSS-150	A+ Computer Maintenance	4
GEOG-150	Map, Compass & GPS	2
GIS-201	Introduction to Geographic Info Sys	3
GIS-202	Data Management	3
GIS-203	Spatial Analysis	4
GIS-204	Advanced Cartography	4
GIS-205	Remote Sensing	4
GIS-272	Co-op\Internship	3
XXXX-xxx	Approved Electives*	7
<b>*Approved Elective (7 Credits)</b>		
BUSN-203	Management Information Systems	3
CIS-130	Spreadsheet Applications	3
CIS-140	Database Fundamentals	3
CNSS-245	SQL Server	4
CNSS-262	Web Server Administration	4
CSCI-110	Introduction to Programming	3
CSCI-121	C++ Programming I	4
GIS-273	GIS Co-op Work Experience	1-8
GIS-274	GIS Co-op Work Experience	1-8

### Suggested Sequences Per Semester

		<u>Cr / Ct</u>
<b>First Semester</b>		
ENGL-101	Rhetoric & Composition	3/3
GEOG-110	Physical Geography	4/6
CNSS-150	A+ Computer Maintenance	4/6
GIS-201	Introduction to Geog Info Sys	3/3
		<b>14/18</b>
<b>Second Semester</b>		
XXXX-xxx	Approved Electives	3/3
CIS-101	Computer Concepts & Apps	4/4
GEOG-125	World Regional Geography	3/3
	Developed World	
GEOG-150	Map, Compass, and GPS	2/2
XXXX-xxx	Social Behavioral or Humanities	3/3
		<b>15/15</b>
<b>Third Semester</b>		
CIS-210	Web Page Design & Structure	3/3
MATH-xxx	Math-105, 107, or higher	4/4
BIOL-107	Environmental Science	3/3
GIS-202	Data Management	3/3
GIS-203	Spatial Analysis	4/4
		<b>17/17</b>
<b>Fourth Semester</b>		
XXXX-xxx	Approved Elective	4/4
GIS-204	Advanced Cartography	4/4
GIS-205	Remote Sensing	4/4
GIS-xxx	Co-op\Internship	3/3
		<b>15/15</b>

All Internships and Co-ops require that the student pass a criminal background check.