

SCHOOL OF COMMUNICATION ARTS, COMPUTERS AND TECHNOLOGY
Geospatial Technology A.A.S. (GIS)

The Geospatial Technology A.A.S. degree and GIS certificate are strong and cutting-edge technical degrees in geospatial technology and provide a foundation for students planning a career in geospatial technology or supplemental preparation for other fields. These degrees address the Department of Labor’s Geospatial Technology Competency Model (GTCM) with an emphasis in geographic information systems (GIS), spatial analysis, remote sensing, and global positioning systems (GPS). The programs not only provide students with core competencies in GIS, but reaches farther into the geospatial spectrum by providing a strong emphasis in aerial and satellite-based remote sensing, spatial data acquisition, and publication to the Internet. The degrees provide students with the opportunity to develop skill sets used in many professions.

The curriculum is designed to prepare students to:

- use the Geographic Information System software packages and the geospatial data processing tools.
- understand GIS and remote sensing theory, data acquisition, data processing, and applications.
- understand how GIS is applied to various professions, including but not limited to: agriculture, forestry, environmental, health, transportation, economic development, homeland security, law enforcement, and urban planning.

Career Opportunities:

Students completing the Geospatial Technology A.A.S. degree or GIS certificate will be highly qualified for most entry-level and even intermediate geospatial technology positions, specifically in Geographic Information Systems. The programs give students a competitive edge because students have the opportunity to focus on advanced GIS technological skill sets. Positions could include: local, state, and federal governmental agencies, nonprofit organizations, transportation, public utilities, private sector positions, and military.

The geospatial technology industry is extremely diverse and interdisciplinary, applicable and highly needed in the following industries: business and marketing, geography, urban planning and transportation, architecture, public safety, homeland security, criminal justice and law enforcement, public health, forestry and agriculture, environmental science and wildlife conservation, energy management, natural resource management, history and archeology, sociology, the military, disaster response and mitigation, surveying, computer science, and more.

All GIS courses will be offered online. Depending upon selection, most General Education courses are offered online.

Upon successful completion of this program, students will be able to:

- obtain an industry standard Geospatial Certification from ESRI.
- work with ESRI software.
- be knowledgeable about spatial technology and remote sensing.

First Semester		Credits
CIS 105	Introduction to Computers and Applications	3
CIS 180	Introduction to Project Management	3
ENG 105	Research and Composition	3
GIS 110	Introduction to Smart Mapping (Geographic Information Systems) (1st 8 weeks)	3
GIS 115	Intermediate Geographic Information Systems (2nd 8 weeks)	3
		15
Second Semester		
IDS 105	Thinking, Problem Solving, and Team Building	3
ENG 107	Technical Writing	3
GIS 210	Intermediate GIS 2 (1st 8 weeks)	3
GIS 215	Remote Sensing & Advanced Applications in GIS (2nd 8 weeks)	3
Elective*	GIS	3
		15
Third Semester		
Elective+	Mathematics	3
BUS 120	Introduction to Business Organization	
or BUS 248	Essentials of Entrepreneurship and Small Business	3
BIO 135	Introduction to Environmental Science	3
Elective*	GIS	3
Elective*	GIS	3
		15
Fourth Semester		
Elective	Humanities	3
GIS 220	Capstone in Geospatial Technology	3
Elective	Social Science	3
GEO 110	Cultural Geography or	
or GEO 115	World Regional Geography	3
Elective♦	Elective	3
		15
Credit Total		60

*GIS Elective – select from one of the following:
 GIS 120 – GIS in Homeland Security
 GIS 125 – GIS in Law Enforcement
 GIS 130 – GIS in Economic Development
 GIS 135 – GIS in STEM

+MAT 118 or above

♦Recommended elective: May choose GIS 280 - GIS Internship.