GEOSPATIAL TECHNOLOGY, Associate in Science Degree - 4760

Engineering, Trades & Computer Technologies Department
CIP Code: 45.0702

The Geospatial Technology AS program provides students with the foundational knowledge, skills and practical hands-on experience needed to pursue a career in geospatial technology. Geospatial technology is an-industry requiring technicians to be skilled in data acquisition, management, interpretation, integration, analysis, representation, and graphical display, all of which are part of the curriculum. In addition, the high-technology nature of geospatial technology demands personnel who are able to work in cross-functional teams in a rapidly evolving employment setting. Students are able to gain "real-world" experience in the internship course. This course allows students the opportunity to face the issues, challenges and projects that are encountered by geospatial technologists on a daily basis. The coursework is aligned with the Geospatial Technology Competency Model (GTCM) developed by the US Department of Labor and the GeoTech Center. The complete program is only available online.

Career or Transfer Opportunities
Graduates of the Geospatial Technology AS program find employment as geographic information technicians, analysts, specialists, or other disciplines related to the acquisition, use and processing of geographic and time-based data. Although this degree can lead directly to employment, there are transfer opportunities available for students seeking to pursue their studies at the baccalaureate level. Graduates may pursue a bachelor's degree in Technical Management through HACC's articulation agreement with Bloomsburg University.

Competency Profile
This curriculum is designed to prepare students to:

- Apply geospatial technology skill sets to analyze spatial questions, patterns, trends, distributions and flow spatially and over time
- Evaluate, generate, manage, acquire and process geospatial information
- Query, summarize and analyze spatial and non-spatial data
- Develop geospatial data, maps and applications using GIS and remote sensing software to describe, visualize and analyze geographic questions
- Design, manage and implement geospatial projects

PROGRAM REQUIREMENTS (TOTAL CREDITS = 60)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	GIS 141 Introduction to Geospatial Technology	3	CIS 140 Intermediate Database Management	3
ENGL 104 Technical Writing	3	GIS 204 Cartographic Design	3	Open Electives*	12
COMM 101 Effective Speaking	3	GIS 205 Data Acquisition & Remote Sensing	4		**15**
Humanities & Arts Elective	3	GIS 221 Web Geographic Information Systems (GIS)	3		
Mathematics Elective - ***MATH 103***	3	GIS 275 Spatial Analysis	4		
Mathematics or Science Elective - ***MATH 202***	4		**17**		
Science with a Laboratory Elective - ***GEOL 201***	4				
Social & Behavioral Science Elective - ***GEOG 230***	3				
First-Year Seminar Elective - ***GIS 201***	1				
Wellness	1				
	28				

** Students are recommended to take GIS 291 to fulfill one of the 12-credits of Open Elective requirement.*

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
ENGL 101	3	CIS 140	3	GEOG 230	3	GEOL 201	4
GIS 141	3	COMM 101	3	GIS 221	3	GIS 275	4
GIS 201	1	ENGL 104	3	GIS 204	3	Open Electives*	6
Humanities/Arts Elective	3	GIS 205	4	Open Elective*	3		
MATH 103	3	MATH 202	4	Wellness	1		
Open Elective*	3						