GEOSPATIAL TECHNOLOGY (AAS)

Award: Associate of Applied Science Degree
No. of credits required: 60
For more information: *Contact Assistant Professor Tamara Biegas, 443-412-2034,* tbiegas@harford.edu*; or Admissions, 443-412-2109.*

Program Description

The Geospatial Technology Program provides students with the skills, knowledge and hands-on experience to pursue a career in geospatial technology. The Geospatial Technology Program offers a comprehensive array of Geographic Information Systems, Remote Sensing, and Global Positioning Systems. Geospatial Technology can be applied in a variety of fields including, but not limited to Education, Public Safety, Local, State, and Federal Government, Banking, Health and Human Services, Transportation, Utilities, Natural Resources, Business, Manufacturing, and Telecommunication to make informed data driven decisions by analyzing geospatial data.

Program Goals

Upon completion of the Geospatial Technology program, students will be able to:

1. Apply techniques and knowledge of Geospatial Information Systems (GIS), Global Positioning Systems, and Remote Sensing.
2. Develop maps using GIS and remote sensing software to visualize geospatial data.
3. Apply principles of geospatial technology through experiential learning with real world data in a laboratory setting, cooperative education, classroom discussions.
4. Describe the design, management and implementation of a geospatial project.
5. Evaluate, generate, manage, acquire, and process geospatial information.
6. Demonstrate effective written and oral communication skills.

Transfer Information

Students interested in transferring to a four-year institution should seek advising.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

First Semester		Credits
ENG 101	English Composition (GE)	3
CIS 102	Introduction to Information Sciences (GI)	3
MATH 101	College Algebra (GM)	3
GEOG 101	Physical Geography (GB)	3
GEOG 203	Fundamentals of Geospatial Technology	3
	Credits	**15**
Second Semester		
CMST 101	Speech Fundamentals (GI)	3
CIS 118	Introduction to Microsoft Access	3
MATH 216	Introduction to Statistics (GM)	4
GEOG 204	Introduction to Geographic Information Systems	4
Physical Education Elective		1
	Credits	**15**
Third Semester		
ENG 209	Technical Writing	3
GEOG 210	Remote Sensing and Global Positioning Systems	3
GEOG 220	Advanced Geospatial Information Systems	3
Arts/Humanities Elective (GH) (https://catalog.harford.edu/general-education/#arts-humanities)		3
Program Electives (p. 1)		3
	Credits	**15**
Fourth Semester		
GEOG 230	Geospatial Project	4
Biological/Physical Lab Science Elective (GL) (https://catalog.harford.edu/general-education/#biological-physical-laboratory-science)		4
Program Electives (p. 1)		7
	Credits	**15**
	Total Credits	**60**

Program Electives

Code	Title	Credits
CADD 101	Introduction to CADD	3
CIS 111	Programming I: C/C++	4
CIS 115	Fundamentals of Programming	3
CIS 229	Python Programming Language	4
CMST 106	Business & Professional Speech	3
GEOG 102	Human Geography (GB) (D)	3
ENV 111	Introduction to Environmental Science (GS)	3
ENV 112	Environmental Science Laboratory (GL)	1
MATH 203	Calculus I (GM)	4
GEOG 283	Geography Internship	3

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)