

# CERTIFICATE IN APPLIED GEOSPATIAL SCIENCE AND TECHNOLOGY

Room 2023 Ward Beecher Hall  
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The certificate in Geospatial Science and Technology provides a program for students and professionals interested in geospatial careers and technologies (including Geographic Information Science, Remote Sensing, the Global Positioning System, Cartography, and spatial data handling and analysis). The Certificate signifies academic proficiency in Geospatial Science and Technology and is administered by the Department of Physics, Astronomy, GIS, Geology, and Environmental Science. It is rendered upon completion of the requirements below and includes both a physical copy of the certificate plus an entry on student transcripts.

Students must take a minimum of 18 s.h. (6 courses) as listed below and complete them with a cumulative GPA of 3.00 (B) or higher and no course grade below a C. The certificate is available to undergraduates and non-degree seeking professionals who meet course requirements. Note that some classes may require prerequisite courses for entrance.

COURSE	TITLE	S.H.
<b>Required Courses (12 s.h.)</b>		
GIS 2611	Geospatial Foundations	3
GIS 3701	Introduction to Geographic Information Science	3
GIS 3702	Introduction to Remote Sensing	3
GIS 4801	Advanced Geographic Information Science	3
<b>Select two elective courses from the following (6-7 s.h.):</b>		<b>6-7</b>
GIS 2610	Map Use and Interpretation	
GIS 3712	Thematic Map Design and Symbolization	
GIS 3781	Geographic Information Sciences Application for the Social Sciences	
GIS 3782	GIS Applications for the Natural Sciences	
GIS 3783	Geographic Information Science Applications to Urban and Regional Studies	
GIS 4840	Special Topics in GIS	
GIS 4802	Advanced Remote Sensing	
GIS 5812	GPS and GIS	
GIS 5820	Directed Research in GIS	
STEM 4890	STEM Internship <sup>1</sup>	
CSIS 3722	Development of Databases	
CSIS 3726	Visual/Object-Oriented Programming	
CEEN 2610 & 2610L	Surveying and Surveying Laboratory	
GEOL 4812	GIS Applications to Geology	
<b>Total Semester Hours</b>		<b>18-19</b>

<sup>1</sup> These courses are allowed for credit in the GSAT certificate only if they contain a significant GIS / geospatial / remote sensing focus, are taken for 3-4 s.h. of credit, and are given approval by the chairperson.