## GEOGRAPHIC INFORMATION SYSTEMS AND SCIENCE (UNDERGRADUATE CERTIFICATE)

## **Program of Study**

Code	Title	Credit Hours
Required Curriculum		7
A grade of B or better is required in each course		
GEOG 2215	Introduction to the Geographic Information Systems	3
GEOG 5215U	Advanced Geographic Information Systems	4
Elective Curriculum 9-1		
A grade of B or better is required in each course		
GEOG 3828	GIS Module Independent Study	4
GEOG 4615	Internship (offered through negotiated contract)	<sup>3</sup> 1-3
ENVS 5235U	Geographic Information and Global Positioning Systems $^{\rm 5}$	4
DATA 1501	Introduction to Data Science	3
BUSA 2100 or MISM 2115	Introduction to Information Systems in Business	s 3

Additional GIS - oriented courses approved by the certificate coordinators as they become available will be suitable as elective coursework.

- <sup>3</sup> There are specific obligations to GEOG 4615 Internship that must be met for the internship, paid or unpaid, to qualify for credit.
- <sup>4</sup> As examples of additional GIS course work that would qualify, the department is currently considering extending the GIS curriculum to include a remote sensing class and a GIS programming class.
- <sup>5</sup> Can be used to replace GEOG 2215 as a required course for students in the MS Environmental Science program.

Prerequisites: GEOG 2215 Introduction to the Geographic Information Systems offered in Fall and Spring Semesters