

# GEOSPATIAL SCIENCE (GRADUATE CERTIFICATE)

<https://gradschool.unh.edu/program/certificate/geospatial-science>

## Description

The Graduate Certificate in Geospatial Science (GSS) at the University of New Hampshire is a multidisciplinary program designed to provide graduate level education in the applied and theoretical technology and applications of geospatial science. Students within the program are afforded the opportunity to build their five course requirement certificate from a variety of required and elective classes from different disciplines to best fit their academic, research, or professional interests. The flexibility of this program makes the program ideal for a student looking to complement their degree or a professional looking to build knowledge, skill and credentials within the Geospatial Sciences.

## Requirements

### Certificate Requirements

The program of study required for the certificate consists of five courses and a total of **16 credit hours**.

Course offerings and requirements are as follows:

Code	Title	Credits
<b>Elements of Geospatial Science (Core requirement)</b>		
GSS 800	Elements of Geospatial Science	4
<b>Geographic Information Systems</b>		
Select one of the following:		
GSS 805	Applied Geographic Information Systems for Research	4
GSS 807/ESCI 895	GIS for Earth and Environmental Science	4
GSS 809/CEE 896	GIS for Water Resources	4
NR 860	Geographic Information Systems in Natural Resources <sup>1</sup>	4
<b>Data Analysis</b>		
Select one of the following:		
BIOL 811	Experimental Design & Analysis	4
ESCI 896	Topics (Time Series Analysis)	1-4
MATH 836	Advanced Statistical Methods for Research	3
MATH 839	Applied Regression Analysis	3
MATH 944	Spatial Statistics <sup>2</sup>	3
SOC 901	Sociological Methods I: Intermediate Social Statistics	4
<b>Electives</b>		
Select two of the following:		
GSS 817/ESCI 896	Remote Sensing for Earth and Environmental Science	4
GSS #896	Special Topics (Crowd Source Mapping)	4
MATH 831	Mathematics for Geodesy	3
NR 857	Remote Sensing of the Environment	4
NR 859	Digital Image Processing for Natural Resources <sup>1</sup>	4
NR 882	Forest Health	4
NR #912	Sampling Techniques	2-4
OE/ESCI 871	Geodesy and Positioning for Ocean Mapping	4
SOC 897	Special Topics (Sociological Methods -Survey Research)	4

<sup>1</sup> Prerequisite needed.

<sup>2</sup> MATH 944 Spatial Statistics may be taken as an elective if not used to fulfill the Data Analysis Core requirement.