

REQUIREMENTS FOR THE GRADUATE CERTIFICATE
COLLEGE OF ATMOSPHERIC AND GEOGRAPHIC SCIENCES
THE UNIVERSITY OF OKLAHOMA

Academic Year
For Students Entering the Oklahoma State System for Higher Education Summer 2023 through Spring 2024

General Requirements
Minimum Total Hours 12

Program
Geospatial Technologies
G042, G043 (Online)
Graduate Certificate

Masters students in the existing degree program may be focused in physical geography, human geography, or applications of geotechnologies to geographic questions. For this certificate, however, we recommend a subset of existing courses to focus on one or more of the following: geographical information systems (GIS), remote sensing (RS), or management of geodatabases associated with GIS, RS, or other geospatial technologies.

The embedded certificate consists of a minimum of 12 hours consisting of at least four courses, at least two of which are required to have the GIS prefix.

CERTIFICATE REQUIREMENTS

Code	Title	Credit Hours
Fundamentals ¹		
Choose two of the following Fundamentals courses:		6
GIS 5003	Spatial Data Management for GIS Professionals	
GIS 5013	Fundamentals of Geographic Information Systems	
GIS 5133	Fundamentals of Remote Sensing	
Techniques		
Choose at least one course from the following:		3
GIS 5923	Spatial Statistics	
GIS 5653	Spatial Programming and GIS	
GEOG 5313	Interpreting Society and Environment: Qualitative Research Methods	
ISE 5103	Intelligent Data Analytics	
Advanced/Applied Courses ²		
Choose one of the following Advanced/Applied courses:		3
<i>Geographic Information Science Track</i>		
GIS 5253	GIS Applications	
GIS 5453	Advanced GIS and Spatial Analysis	
RCPL 5463	Geographic Information Systems for Land Use Planning	
RCPL 5970	Special Topics/Seminar (Topic: Advanced GIS)	
<i>Remote Sensing Track</i>		
GIS 5233	Digital Image Processing	
GRAD 5203	EOS3 Data Analytics	
CEES 5903	Remote Sensing Hydrology	
PBIO 5733	Environmental Remote Sensing	
METR 5673	Weather Radar Theory and Practice	
Total Credit Hours		12

¹If the student previously finished a fundamentals course as an undergraduate, they should take an additional course from the Advanced/Applied list instead.

²If students started in the Geographic Information Science track, they should continue in this track when choosing Advanced/Applied courses. If students started in the Remote Sensing track, they should continue in this track when choosing Advanced/Applied courses.

A graduate *certificate* is not a graduate *degree*. A graduate degree represents a program of independent inquiry beyond the depth of coursework alone, while a graduate certificate represents a set of courses only.

- All courses must be taken at OU. No transfer credit will apply.
- No course substitutions are permitted for graduate certificates.
- Coursework applied to a graduate certificate cannot be more than five years old as of the semester the graduate certificate is awarded.
- Students must earn a grade point average of 3.00 or higher on all coursework applied to the graduate certificate.

More information in the catalog: (<http://ou-public.courseleaf.com/atmospheric-geographic-sciences/geography-environmental-sustainability/geospatial-technologies-grad-cert/>).