

The Geographic Information Science Certificate provides the recipient with a working knowledge of Geographic Information Science (GISci) in sufficient detail that they are prepared for professional positions involving the theoretical and applied aspects of implementing and administering a Geographic Information Science.

To the prospective employer, the certificate is a professional endorsement that the recipient has received five university level courses on issues fundamental to the design, implementation, and management of Geographic Information Science. A formal certificate issued by the Texas State's College of Liberal Arts and a statement on the recipient's Texas State transcript recognize successful completion of the program.

Applicants to the Geographic Information Science Certificate program are required to be a Texas State University undergraduate degree seeking or post-baccalaureate student in good standing.

The certificate in Geographic Information Science requires 19-20 semester credit hours. Students must complete the following courses with no grade less than a "C" and an overall average for the five classes of at least a 2.5.

Code	Title	Hours
GEO 2426	Fundamentals of Geographic Information Systems	4
GEO 3426	Advanced GIS	4
Select three of the following:		11-12
GEO 3411	Maps and Mapmaking	
GEO 3416	Remote Sensing and Earth Observation	
GEO 4411	Advanced Cartographic Design	
GEO 4412	Digital Image Processing and Machine Learning	
GEO 4424	GPS and GIS	
GEO 4422	Web Mapping	
GEO 4427	GIS Consulting Practicum	
<b>Total Hours</b>		<b>19-20</b>

## Recommended Specializations

Code	Title	Hours
<b>GIS</b>		
GEO 2426	Fundamentals of Geographic Information Systems	
GEO 3426	Advanced GIS	
GEO 4427	GIS Consulting Practicum	
<b>Remote Sensing</b>		
GEO 3416	Remote Sensing and Earth Observation	
GEO 4412	Digital Image Processing and Machine Learning	
<b>Cartography</b>		
GEO 3411	Maps and Mapmaking	
GEO 4411	Advanced Cartographic Design	
GEO 4422	Web Mapping	
<b>GPS</b>		
GEO 4424	GPS and GIS	

For additional information and application process, discuss with an academic advisor or refer to <http://www.geo.txstate.edu/degrees-programs/certificates.html>.