

# GEOGRAPHIC INFORMATION SYSTEMS - (M.S.) - CARTOGRAPHY & REMOTE SENSING

**Important:** This degree plan is effective for those starting this degree program in fall 2023 through summer 2024. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

Code	Title	Hours
<b>Core Courses</b>		
GEOG 501	Research Methods	3
GEOG 502	Introduction to Geographic Information Systems (GIS)	3
GEOG 503	Cartography and Geographic Visualization	3
GEOG 506	Spatial Statistics	3
GEOG 507	Analysis and Modeling	3
GEOG 641	GIS for Urban Planning	3
GEOG 642	GIS for Disaster Management	3
GEOG 643	GIS for Environmental Sciences	3
GEOG 699	Internship in Geography	3
<b>Total Hours</b>		<b>27</b>

Code	Title	Hours
<b>Cartography &amp; Remote Sensing Cognate</b>		
GEOG 640	Remote Sensing	3
GEOG 650	GIS Programming and Automation	3
GEOG 660	Advanced Topics in GIS and Remote Sensing	3
<b>Total Hours</b>		<b>9</b>

All applicable prerequisites must be met

## Graduation Requirements

- Complete 36 hours
- A maximum of 50% of the program hours may be transferred if approved and allowable, including credit from an earned degree from Liberty University on the same academic level
- 3.0 GPA
- Grades of C are not permitted in the Core area (includes grades of C+ & C-)
- No more than two grades of C may be applied to the degree (includes grades of C+ & C-)
- No grade of D or below may be applied to the degree (includes grades of D+ & D-)
- Degree must be completed within 5 years
- Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

## Program Offered in the Online Format Course Sequence

Course	Title	Hours
<b>First Year</b>		
<b>First Semester</b>		
GEOG 501	Research Methods	3
GEOG 502	Introduction to Geographic Information Systems (GIS)	3
GEOG 503	Cartography and Geographic Visualization	3
<b>Hours</b>		<b>9</b>
<b>Second Semester</b>		
GEOG 506	Spatial Statistics	3
GEOG 507	Analysis and Modeling	3
GEOG 641	GIS for Urban Planning	3
<b>Hours</b>		<b>9</b>
<b>Second Year</b>		
<b>First Semester</b>		
GEOG 640	Remote Sensing	3
GEOG 642	GIS for Disaster Management	3
GEOG 643	GIS for Environmental Sciences	3
<b>Hours</b>		<b>9</b>
<b>Second Semester</b>		
GEOG 650	GIS Programming and Automation	3
GEOG 660	Advanced Topics in GIS and Remote Sensing	3
GEOG 699	Internship in Geography	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>36</b>