



## Geospatial Information Science (GIS) Minor

The GIS minor program was designed to give students the technical skills essential to acquire, manage, analyze and extract information from various forms of geospatial data. The program will prepare students to seek employment in a technologically advanced field recognized by the U.S. Department of Labor as a growth industry.

A minor in GIS can open the door for entry-level employment in federal and state agencies, local government, or the private sector.

## Who can minor in GIS?

Any student who has an interest in spatial data acquisition, analysis, and interpretation can minor in Geospatial Information Science. There are no special requirements to join the program. We hope you will contact the Department of Agriculture and Environmental Sciences to find out how a GIS minor can benefit you.

## Contact us



### Department of Agriculture and Environmental Sciences

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MINOR IN

## GEOSPATIAL INFORMATION SCIENCE

**Lincoln**  
UNIVERSITY



*Immediately to the left is drone imagery of of an experimental quinoa plot at Lincoln University's Busby Farm. Geospatial information science can be used in agricultural/vegetation research.*

# Laboratory Facility

The GIS laboratory is equipped with state-of-the-art computer hardware, software, and other peripheral devices. The Center of Excellence in Geospatial Information Science Laboratory hosts 20 workstations, nine Trimble mapping grade GPS receivers and two small unmanned aerial vehicles (drones). Several geospatial software packages, including ESRI's ArcGIS 10.8 Desktop, ERDAS IMAGINE 2020, and ENVI 5.6 are also hosted in the laboratory.

## GIS Minor Disciplines

### Cartography

- Design and produce maps

### Global Positioning System (GPS)

- Collect data (point, line, area)
- Navigate to points of interest

### Geographic Information Systems

- Generate and manage spatial data and attributes
- Analyze, interpret, and extract information from various data layers
- Measure, map, monitor, and model environmental processes
- Disseminate information in the form of maps, graphs, tables and electronic files

### Remote Sensing

- Acquire and process drone imagery
- Process and interpret satellite imagery
- Monitor vegetation changes
- Monitor environmental changes
- Monitor and assess natural disasters

## GIS Minor Courses

(18 credit hours required)

### GIS 208:

Introduction to Geospatial Information Science

### GIS 301:

Fundamentals of Global Positioning Systems

### GIS 308:

Computer Assisted Cartography

### GIS 316:

Fundamentals of Geographic Information Systems

### GIS 416:

Geographic Information Systems Applications

### GIS 440:

Remote Sensing of the Environment

Jefferson City

*Pictured below is a map showing the path of the tornado that hit Jefferson City in 2019.*

Tornado Path



Eldon

0 5 10 15 Miles

