# Geographic Information Systems (Minor)

The Geographic Information Systems (GIS) graduate minor provides an academic credential for graduate students who want to develop some GIS application skills while pursuing a graduate degree in another discipline. It is designed for students who wish to master the basics of GIS and geospatial analysis.

Adding the minor:

- Students should consult with their program advisor/committee before adding the minor.
- Students can search for and add the minor via their Graduate Planner in MyPack Portal
- Students will need to identify a member of the geospatial graduate faculty to serve as the GIS Minor rep on their committee. A list of currently approved faculty members can be provided to students upon request by contacting the director of graduate programs for the minor. If no graduate committee is required by the student's program, the student must obtain approval of his or her minor program. Students enrolled in Option B Masters programs are not eligible to declare a minor. Certificate coursework and Minor coursework must be completely independent.

## More Information

Program Website

**Master's Minor Requirements**

| Code | Title | Hours |
|---|---|---|
| **Required Courses** | | **3** |
| GIS 510 | Fundamentals of Geospatial Information Science and Technology | |
| **Elective Courses** | | **6** |
| See "Elective Courses" listed below | | |
| **Total Hours** | | **9** |

## Doctoral Minor Requirements

| Code | Title | Hours |
|---|---|---|
| **Required Courses** | | **3** |
| GIS 510 | Fundamentals of Geospatial Information Science and Technology | |
| **Elective Courses** | | **9** |
| See "Elective Courses" listed below | | |
| **Total Hours** | | **12** |

## Elective Courses

| Code | Title | Hours |
|---|---|---|
| **Select three credits for Master's students or 6 credits for Doctoral students from the following courses:** * | | |
| GIS 511 | Coding for Geospatial Applications | |
| GIS 512 | Introduction to Environmental Remote Sensing | |
| GIS 515 | Cartographic Design | |
| GIS/LAR 517 | GIS Applications in Landscape Architecture and Environmental Planning | |
| GIS 520 | Geospatial Data Science and Analysis | |
| GIS 521 | Surface Water Hydrology with GIS | |
| GIS 530 | Spatial Data Foundations | |
| GIS 535 | Web and Mobile GIS Protocols | |
| GIS 540 | Geospatial Programming | |
| GIS 550 | Geospatial Data Structures and Web Services | |
| GIS 595 | Special Topics in Geospatial Information Science | |
| GIS/MEA 582 | Geospatial Modeling | |
| GIS 584 | Mapping and Analysis Using UAS | |
| GIS 609 | Geospatial Forum | |
| GIS 610 | Special Topics in Geospatial Information Science | |
| GIS 711 | Geospatial Data Management | |
| GIS 712 | Environmental Earth Observation and Remote Sensing | |
| GIS 713 | Geospatial Data Mining | |
| GIS 714 | Geospatial Computation and Simulation | |
| GIS 715 | Geovisualization | |
| SSC 540 | Geographic Information Systems (GIS) in Soil Science and Agriculture | |
| BAE 535 | Precision Agriculture Technology | |
| BAE 536 | GIS Applications in Precision Agriculture | |
| MEA 511 | Introduction to Meteorological Remote Sensing | |
| HI 535 | Spatial History | |
| ST 533 | Applied Spatial Statistics | |

* **Up to 3 credit hours can be non-GIS prefix courses**. Other courses not listed can be approved as an elective upon consultation with the student's primary program advisor and/or committee. Director of the minor should also be notified.

## Faculty

### Director

Eric Money

### Full Professors

Yu-Fai Leung

Ross Meentemeyer

Helena Mitasova

Stacy Nelson

Gary Roberson

Mirela Tulbure

Raju Vatsavai

Sandra Yuter

## Associate Professors

Josh Gray

Jelena Vukomanovic

## Associate Teaching Professors

Eric Money

Stacy Supak

Laura Tateosian

## Lecturers

Kate Jones

Juliana Quist

## Emeritus Faculty

Perver Baran

Heather Cheshire

Hugh Devine

Siamak Khorram