

# Geographic Information Systems Minor

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To earn a minor in Geographic Information Systems, students must complete a minimum of 17 credit hours, including three core courses and a minimum of two elective courses. Students are expected to meet with an ENS academic advisor before beginning the minor. 400-level courses counted toward an undergraduate degree cannot be taken again and counted for credit toward a graduate degree at UIS.

Substitutions for any of these courses require a Student Petition and the approval of the GIS Director and the ENS Program Lead.

## Requirements

### Required Core Courses

|  |   |           |
|--|---|-----------|
| ENS 304                                      | Mapping our Physical and Social World                   | 3         |
| ENS 404                                      | Fundamentals of Geographic Information Systems          | 4         |
| ENS 405                                      | Fundamentals of Remote Sensing                          | 4         |
| <b>Electives (Choose two from this list)</b> |   | <b>6</b>  |
| BIO 446                                      | Restoration Ecology                                     |           |
| BIO 447                                      | Global Change Ecology                                   |           |
| BIO 462                                      | Conservation Biology                                    |           |
| CSC 225                                      | Computer Programming Concepts I                         |           |
| CSC 302                                      | Discrete Structures                                     |           |
| MAT 421                                      | Statistical Methods                                     |           |
| MAT 442                                      | Data-driven Modeling and Numerical Simulation           |           |
| MAT 444                                      | Operations Research Methods                             |           |
| MIS 352                                      | Principles of Management Information Systems            |           |
| MIS 385                                      | Data and Information Management                         |           |
| MPH 222                                      | Global Public Health: Population, Poverty and Pollution |           |
| MPH 224                                      | Epidemiology - Science of Disease Discovery             |           |
| MPH 471                                      | ECCE: Emerging Diseases                                 |           |
| <b>Total Hours</b>                           |   | <b>17</b> |