## The Academic Minor

Many departments have designed academic minors for the convenience of undergraduate students. A minor is a structured group of courses that leads to considerable knowledge and understanding of a subject, although with less depth than a major. Some employers consider minors desirable, and the corresponding major requirements at the University may stipulate a minor. Some students choose to complement their major program with a minor in a related field or even in an entirely different field of interest. Students interested in pursuing an academic minor should contact their college dean’s office and the department responsible for the minor program for guidance and advising.

Please note that undergraduate students can only complete a minor in addition to and as a complement to a major. The University does not award stand-alone minors.

### Minor in Mapping and GIS

The minor in Mapping and GIS requires 18 hours as follows:

**Introduction to Digital Mapping** (3 hours)
- GEO 109 Digital Mapping ............................................................... 3

**GIS Theories and Methods** (6 hours)
- GEO 309 Introduction to GIS .......................................................... 3
- GEO 409 Advanced GIS ................................................................. 3

**GIS Design and Application** (9 hours)

Complete three of the following:
- GEO 305 Elements of Cartography .................................................. 3
- *GEO 399 Internship in Geography .................................................. 3
- GEO 415 Map Interpretation ............................................................ 3
- GEO 419 Introduction to Remote Sensing .......................................... 3
- GEO 505 Practicum in Cartography .................................................. 3
- GEO 509 Workshop in Geospatial Technologies ................................. 3
- *GEO 560 Independent Work in Geography ...................................... 3
- *GEO 565 Topics in Geography ....................................................... 3

*With approval of DUS for GIS/Mapping related internships or independent study.

Geography majors can also minor in Mapping and GIS, but no more than 6 credits can be used to cover both major and minor requirements.