Land Use, B.S., Geographic Information Systems (GIS) Concentration
303-556-3143 Science 2028
School of Letters, Arts, and Sciences

This sheet applies to the 2013-14 catalog only. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors must work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

<table>
<thead>
<tr>
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<th>General Studies</th>
<th>Major courses</th>
<th>Electives</th>
<th>Total to graduate (min. 40 hrs upper-division)</th>
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<tbody>
<tr>
<td></td>
<td>33 min</td>
<td>65</td>
<td>22</td>
<td>120 min</td>
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Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

**TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS**

**Written Communication**

___ ENG 1010 (3 hrs.) Composing Arguments*  
___ or ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II*  
___ ENG 1020 (3 hrs.) Freshman English: Anal.,Rsrch.& Docum.  
(to be completed within 45 college-level credit hours)

**Quantitative Literacy**

___ MTH 1110 or MTH 1400 or MTH 1410

**Oral Communication**

___ (3 hrs.)

**Arts and Humanities**

___ (3 hrs.)  
___ (3 hrs.)

**Historical**

___ (3 hrs.)

**Natural and Physical Sciences**

___ (3 hrs.)  
___ (3 hrs.)

**Social and Behavioral Sciences I**

___ (3 hrs.)

**Social and Behavioral Sciences II**

___ (3 hrs.)

**Global Diversity**

___(3 hrs.) may be satisfied within General Studies

___ Multicultural Requirement may be satisfied in Gen Studies, major, minor, or electives

**MAJOR CORE COURSES** (Please see a Faculty Advisor)

Students must receive a C or better in all courses.

___ GEG 1220 (2 hrs) Map Use  
___ GEG 1610 (1 hr) Introduction to Planning  
___ GEL 1010 (4 hrs) Physical Geology  
OR GEG 1100 (3 hrs) Introduction to Physical Geography  
___ GEG 4950 (2-15 hrs) Internship in Land Use  
OR GEL 4950 (2-15 hrs) Internship in Geology  
OR ENV 4950 (2-15 hrs) Internship in Environmental Science  
___ GIS 2250 (3 hrs) Introduction to GIS  
___ MTH 1210 (4 hrs) Introduction to Statistics

**Geographic Information Systems (GIS) Concentration:**

Students must complete each course with a grade of "C" or better. The course cannot be taken pass/fail.

___ GEG 3610 - Principles of Land Use Planning  
___ GIS 2710 - Global Positioning Systems  
___ GIS 3250 - Cartography  
___ GIS 4840 - Remote Sensing  
___ GIS 4850 - Spatial Modeling in Raster  
___ GIS 4860 - GIS Applications  
___ GIS 4870 - Spatial Databases  
___ GIS 4890 - Advanced GIS Project

Select from the following to a total of 46 hrs.

___ GIS 4880 - Current Topics in GIS: Variable Topics  
___ MTH 3240 - Environmental Statistics  
___ CSS 1247 - Introduction to Programming: Visual Basic

Because GIS is an application tool, students are required to specialize in an area of interest. A student can select one of the following interest areas (Environment, Meteorology, Planning, Resources) or design one with the approval of a department advisor or select a minor in Computer Science (School of Letters, Arts and Sciences); Computer Information Systems, General Business, International Business, Marketing (School of Business), or Criminal Justice and Criminology (School of Professional Studies).

**Areas of Interest**

___ Environment (19 hrs, See Catalog for approved courses)  
OR Meteorology (19 hrs, See Catalog for approved courses)  
OR Planning (19 hrs, See Catalog for approved courses)  
OR Resources (19 hrs, See Catalog for approved courses)  
OR Surveying and Mapping (19 hrs, See Catalog for approved courses)