

About this Minor . . .

The Physical and Environmental Sciences (PES) Department at Colorado Mesa University offers a minor in Geographic Information Science and Technology. The courses are open to all students interested in broadening their knowledge and enhancing job-related skills in a rapidly expanding market of computer-based technology. The multidisciplinary nature of the geographic information science and technology allows students from a wide variety of fields to participate in this exciting program.

Geographic Information Science and Technology includes Geographic Information Systems, Global Positioning Systems, and Remote Sensing. A geographic information system (GIS) is a computer-based tool for mapping and analyzing geospatial data. GIS technology is a subset of information systems where the databases consists of features, activities, or events that are definable in space as points, lines, or areas. GPS (Global Positioning System) is a satellite system that allows users to collect precise geographic data for use in mapping. Remote sensing refers to any technique whereby information about objects and the environment is obtained from a distance, such as from aircrafts or satellites. Remote sensing often permits us to greatly expand our spectral view of the earth and “see” the world much more clearly than we can with the unaided eye.

There is a strong demand for people who are trained in Geographic Information Science and Technology and this minor will assist students in securing jobs in this rapidly growing field. GIS/GPS can be used for cartography, business, biology, geology, environmental science, history, archeology, and criminal justice.

For more information on what you can do with this major, go to <http://www.coloradomesa.edu/gist/index.html>

POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. This program sheet must be submitted with your graduation planning sheet to your advisor during the **semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates**. You must turn in your “Intent to Graduate” form to the Registrar’s Office **by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December**.
3. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar’s Office. (Students cannot handle the forms once the advisor signs.)
4. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.
5. NOTE: During your senior year, you will be required to take a capstone exit assessment/project (e.g., Major Field Achievement Test)

NAME: _____ **STUDENT ID #** _____

LOCAL ADDRESS AND PHONE NUMBER: _____

_____ () _____

I, (Signature) _____, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

Signature of Geographic Information Systems Advisor

Date

Signature of Department Head

Date

Signature of Registrar

Date

Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration.

DEGREE REQUIREMENTS:

- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- A GPA of 2.00 or higher in the minor is required.
- The number of minors a student may receive at Colorado Mesa University shall not exceed two.
- A student must follow the graduation requirements either from 1) the program sheet for the major in effect at the time the student officially declares a major; or 2) a program sheet for the major approved for a year subsequent to the year during which the student officially declares the major and is approved for the student by the department head. Because a program may have requirements specific to the degree, the student should check with the faculty advisor for additional criteria. It is the student's responsibility to be aware of, and follow, all requirements for the degree being pursued. Any exceptions or substitutions must be approved by the student's faculty advisor and Department Head.
- When filling out the program sheet a course can be used only once.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for additional graduation information.

Course No Title	Sem.hrs	Grade	Term/Trns	<u>(BIOL, ENVS)</u>	Course No Title	Sem.hrs	Grade	Term/Trns	
<u>REQUIRED COURSES</u> (16 Semester hours minimum)									
GEOL 305	Cartography for GIS	1	_____	_____	GEOL 375	Global Positioning Systems for GIS	2	_____	_____
<u>OR</u>									
GEOG 131	Introduction to Cartography	3	_____	_____	GEOL 375L	Global Positioning Systems for GIS Lab	1	_____	_____
GEOL 321	Introduction to Remote Sensing	2	_____	_____	GEOL 432	Advanced GIS	2	_____	_____
GEOL 321L	Introduction to Remote Sensing Lab	1	_____	_____	GEOL 432L	Advanced GIS Lab	1	_____	_____
GEOL 332	Introduction to GIS	2	_____	_____	GEOL 445	Geospatial Database & Design	2	_____	_____
<u>(BIOL, ENVS)</u>									
GEOL 332L	Introduction to GIS Lab	1	_____	_____	GEOL 445L	Geospatial Database & Design Lab	1	_____	_____