

# Land Surveying Minor

This minor is designed to provide students with perspective and skills to pursue a successful career in surveying or a surveying related field. The focus is on courses related to surveying such as photogrammetry, global positioning systems, U.S. Public Land Survey System, legal principles of surveying, and project design in surveying. Enrollment in this minor is open to all engineering and non-engineering students.

The Land Surveying Minor, completed co-incident with a Civil Engineering or Construction Engineering Technology degree, is designed to satisfy the land surveying curriculum requirements established by the Montana Board of Professional Engineers and Professional Land Surveyors to be eligible to take the Fundamentals of Surveying (FS) Exam. Students from other major degree programs interested in pursuing professional land surveyor licensure should contact the Civil Engineering Department before enrolling in the Land Surveying Minor.

## Students must complete all of the following courses

### Survey Techniques -12 Credits

SRVY 230	Intro to Surveying for Engineers	3
SRVY 273	Route Surveying	3
or ECIV 350	Transportation Engineering	
SRVY 375	Analytic Photogrammetry and Remote Sensing	3
ECIV 456	Highway Geometric Design	3
or GPHY 426	Remote Sensing	

### Principles and Practices of Land Surveying - 15 Credits

SRVY 355	Surveying Calculations	3
SRVY 361	Intro Legal Princ in Surveying	3
SRVY 362	Public Land Survey System	3
SRVY 474	Project Design in Surveying	3
BGEN 361	Principles of Business Law	3
or AGBE 337	Agricultural Law	

### Elective - 3 Credits

GPHY 284	Intro to GIS Science & Cartog	3
or GPHY 357	GPS Fund/App in Mapping	
or GPHY 384	Adv GIS and Spatial Analysis	
or GPHY 484R	Applied GIS & Spatial Analysis	

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**Total Credits** **30**

\* Courses have prerequisites that must be satisfied prior to enrollment in surveying minor courses. Contact the Civil Engineering Department for more information.