Idaho State University - Academic Certificate in Land Surveying

For individuals who have a bachelor's degree in a field related to surveying, and are seeking to obtain college credit hours in surveying science to meet state licensing education requirements.

Available online courses are from the ABET ETAC accredited *Surveying and Geomatics Engineering Technology* and *Civil Engineering Technology* programs.

- 1. Flexibility to meet individual needs for earning credit:
- 2. The certificate must consist of 30 credits.
- 3. A minimum of 50% or 15 credits must be resident credits (i.e. credits taken at ISU)
- 4. Transfer course substitutions may be applied to the 30 credits if reasonable and/or appropriate related course content can be determined. (case by case review of transcripts)
- 5. Passing a course *Challenge Exam*.
- 6. *Prior Learning Assessment* (PLA) in the form of a portfolio documenting work experience equivalent to course subject matter.

CORE COURSES - Required		21 CREDITS
CET 0112	Beginning Surveying	3 Pre-req or Co-req: ALG, TRIG
CET 0122	Intermediate Surveyingand Spatial Analysis	3 Pre-req: CET 0112
CET 0216	Route Survey and GPS Fundamentals	3 Pre-req: ALG, TRIG CET 0122, Note 1
GEMT 3310	Boundary Surveying Law	3 Pre-req: ALG, TRIG
GEMT 3312	Public Land Surveys	3 Pre-req: ALG, TRIG, Co-req CET 0122
GEMT 4430	GPS Principles and Application	3 Pre-req: ALG, TRIG, CET 0122
GEMT 4411	Geodesy	3 Pre-req: ALG, TRIG, CET 0122
CHOOSE ELECTIVES		9 CREDITS
GEMT 3311	Advanced Surveying	3 Pre-req: ALG, TRIG, CET 0122
GEMT 3314	Research and Evidence in Surveying	3 Pre-req: ALG, TRIG, Co-req CET 0122
GEMT 3315	Surveying Adjustments	3 Pre-req: Calculus I, CET 0122
GEMT 3317	Subdivision Planning and Platting	2 Pre-req: ALG, TRIG, CET 0122
GEMT 3319	Writing Legal Descriptions	1 Pre-req: ALG, TRIG, CET 0122
GEMT 4425	Principles of Cartography	3 Pre-req: ALG, TRIG, CET 0122, Note 2
GEMT 4432	Principles of Photogrammetry	3 Pre-req: ALG, TRIG, CET 0122
TOTAL CREDITS		30 CREDITS

Note 1: Civil drafting software experience/coursework recommended. *Note 2:* CET 0228 Principles of GIS or equivalent to ArcGIS Pro

Elective Criteria

- 1. Elective courses must be in a related subject matter to the surveying profession.
- 2. Courses focused on learning basic software (e.g. CAD, etc.) are not considered appropriate related electives.
- 3. Advanced subject matter courses other than those listed may be considered on a case by case basis.

NOTE: Refer to individual state surveying licensing education requirements to ensure that all needed courses are taken. State Licensing Board determines "Related Degree" and any additional math/science courses. Click the following link to verify individual *State Licensing Boards for Rules and Regulations* required for licensure. <u>https://ncees.org/state-links/</u>