B.S. Surveying and Geomatics Engineering Technology

To declare a major in Surveying and Geomatics Engineering Technology Bachelor of Science degree, a student must have completed a two-year degree in Civil Engineering Technology at ISU, a similar two-year degree from another ABET accredited program, or have permission of the program coordinator. For further details, please consult faculty of the Surveying and Geomatics Engineering Technology program.

This degree builds upon the knowledge a student has gained through the pursuit of an earned two-year degree in Civil Engineering Technology from an ABET accredited program. The student's prior coursework must include the prerequisite math needed to enroll in MATH 1170 Calculus I. It is recommended that prior coursework also include a 3 credit statistics course as this is a prerequisite for GEMT 3315 Surveying Adjustments. The student's previous degree will be evaluated by the program coordinator to determine eligibility for entrance into the Surveying and Geomatics Engineering Technology Bachelor of Science program. Up to 41 credits of coursework from the prior two-year degree may be awarded toward completion of the Surveying and Geomatics Engineering Technology Bachelor of Science degree. If the two-year degree is over 5 years old, the student must be evaluated for currency in the technical field.

General Education

The listing below includes program requirements that also fulfill General Education requirements.

Code	Title	Credits
Objective 1		6
Objective 2		3
Objective 3		3
Objective 4 - PHIL 1103		6
Objective 5 - PHYS 1101/PHYS 1101L recommended		7
Objective 6		6
Students must fulfill Objective 7 or Objective 8		**3**
Objective 7		
Objective 8		
Objective 9		3
Total Credits		**37**

The following courses are required for a Bachelor of Science degree.

Code	Title	Credits
ENGL 3307	Professional and Technical Writing	3
GEMT 3310	Boundary Control and Legal Principles	3
GEMT 3311	Advanced Surveying	3
GEMT 3312	Public Land Surveying	3
GEMT 3313	Surveying Software Applications	2
GEMT 3314	Research and Evidence in Surveying	3
GEMT 3315	Surveying Adjustments	3
GEMT 3317	Subdivision Planning and Platting	2
GEMT 3319	Writing Legal Descriptions	1
GEMT 4400	Essentials of Surveying	2
GEMT 4411	Geodesy	3
GEMT 4415	Survey Office Practice	3
GEMT 4416	Surveying Project	2
GEMT 4430	GPS Principles and Applications	3
MATH 1153	Statistical Reasoning	3
MATH 1170	Calculus I (Satisfies General Education Objective 3)	4
MATH 1175	Calculus II	4
Select ONE of the following:		**3**
GEMT 4432	Principles of Photogrammetry	
GEOL 4409	Remote Sensing	
Select ONE of the following:		**3**
GEMT 4425	Principles of Cartography	
GEOL 4404	Advanced Geographic Information Systems	
GEOL 4427	Information Technology for GIS	
General Education Requirements		
PHIL 1103	Introduction to Ethics (Partially satisfies General Education Objective 4)	3
Total Credits		**56**

Degree Totals

Code	Title	Credits
Program Admission Requirements (surveying credits from prior 2-year degree)		Up to 41
General Education		37
Major Requirements (w/o General Education)		50
Free Electives		0
Total Credits:		**120-131**

Major Academic Plan (MAP)