



A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is only one strategy. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Electives, and university requirements (see pg.2) are based on Catalog Year.

Course Subject and Title	Credits	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester One (CET)						
GE Objective 1: ENGL 1101 Writing and Rhetoric I	3	D-	GE	F, S, Su	Appropriate placement score	
CET 1111: Beginning CAD	3	C-		F, S	Minimum score of ALEKS 30 or equivalent	
CET 1112: Beginning Surveying OR CE 3301: Surveying	3	C-		F, S F, S	MATH 1143 CE 2210 or ME 2210	MATH 1143
^c CET 1115A: Materials Testing I OR CET 1113: Civil and Geomatics Engineering Technology I	4 2	C-		F F, S	Minimum score of ALEKS 30 or equivalent	
^y MATH 1143: Precalculus I: Algebra	3	D-		F, S, Su	Appropriate placement score	
Total	14-16					
Semester Two (CET)						
GE Objective 2: COMM 1101 Fundamentals of Oral Comm	3	D-	GE	F, S		
CET 1121: Civil 3D Drafting	3	C-		F, S	CET 1111	
CET 1122: Intermediate Surveying and Spatial Analysis	3	C-		F, S	CET 1112, MATH 1144	MATH 1144
^c CET 1125A: Materials Testing II OR CET 1123: Civil and Geomatics Engineering Technology II	4 2	C-		S F, S	CET 1115A	
^y MATH 1144: Precalculus II: Trigonometry	2	C-		F, S, Su	MATH 1143 or appropriate placement score	
Total	13-15					
Semester Three (CET)						
GE Objective 5: PHYS 1101/L Elements of Physics and Lab	4	D-	GE	F, S		MATH 1108 or equivalent
CET 2216: Route Survey and GPS Fundamentals	3	C-		F, S	CET 1121, 1122, MATH 1144	
CET 2228: Principles of GIS	3	C-		F, S	CET 1122 or instructor approval	
CET 2232: Plan Reading and Worksite Safety	3	C-		F, S		
^e None OR CET 2215: Materials Theory	0 3	C-		F, S	MATH 1143, 1144	MATH 1144
Total	13-16					
Semester Four (CET)						
GE Objective 3: MATH 1153 Statistical Reasoning	3	C-	GE	F, S, Su	Appropriate placement score	
GE Objective 6: Any	3	D-	GE			
CET 2220: Statics and Strength of Materials	3	C-		S	MATH 1144 or 1147	
CET 2226: Construction Surveying	3	C-		F, S	CET 1122, MATH 1144	
CET 2243: Public Works	3	C-		F, S	MATH 1143, 1144	MATH 1144
CET 2251: Introduction to Legal Descriptions	1	C-		F, S		
GEMT 3313: Surveying Software Applications	3	C-		S, D	MATH 1143, 1144, CET 1122	
Total	19					
Semester Five						
GE Objective 1: ENGL 1102 Writing and Rhetoric II	3	D-	GE	F, S, Su	ENGL 1101/P with a C- grade of higher	
GEMT 3311: Advanced Surveying	3	C-		F	MATH 1143, 1144, CET 1122	
GEMT 3312: Public Land Surveying	3	C-		F, S	MATH 1143, 1144, CET 1122	
GEMT 3317: Subdivision Planning and Platting	2	C-		F, S	MATH 1143, 1144, CET 1122	
GEMT 4430: GPS Principles and Applications	3	C-		F	MATH 1143, 1144, CET 1122	
MATH 1170: Calculus I	4	C-		F, S	Appropriate placement score	
Total	18					

*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major

**See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)

Course Subject and Title	Credits	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester Six						
GE Objective 7 or 8: Any	3	D-	GE			
GEMT 3310: Boundary Control and Legal Principles	3	C-		F, S	MATH 1143, 1144, CET 1122	
GEMT 3314: Research and Evidence in Surveying	3	C-		F, S	MATH 1143, 1144, CET 1122	
GEMT 4411: Geodesy	3	C-		S	MATH 1143, 1144, CET 1122	
GEMT 4415: Survey Office Practice	3	C-		S	MATH 1143, 1144, CET 1122	
MATH 1175: Calculus II	4	C-		F, S, Su	MATH 1170	
Total	19					
Semester Seven						
GE Objective 6: Any	3	D-	GE			
GE Objective 4: PHIL 1103 Introduction to Ethics	3	D-	GE	F, S, Su		
ENGL 3307: Professional and Technical Writing	3	C-		F, S	45 credits and ENGL 1102	
GEMT 3315: Surveying Adjustments	3	C-		S	MATH 1153, 1170, CET 2226	
GEMT 3319: Writing Legal Descriptions	1	C-		F, S	MATH 1143, 1144, CET 1122	
GEMT 4409: Remote Sensing OR GEMT 4432: Principles of Photogrammetry	3	C-		D S	MATH 1143, 1144, CET 1122	
GEMT 4416: Surveying Project	2	C-		D	Senior standing or instructor permission	
Total	18					
Semester Eight						
GE Objective 4: Any in different category than the first	3	D-	GE			
GE Objective 5: Any course not in PHYS	3	D-	GE			
GE Objective 9: Any	3	D-	GE			
GEMT 4400: Essentials of Surveying	2	C-		F, S	Senior standing, completion of Academic Certificate in Land Surveying, or permission of instructor	
GEMT 4404: Advanced Geographic Information Systems OR GEMT 4425: Principles of Cartography OR GEMT 4427: Information Technology for GIS	3	C-		F, S S S	GEOL 4403/L or instructor permission MATH 1143, 1144, CET 1122, 2228 GEOL 4403/L or instructor permission	
Total	14					
*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major **See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)						

2025-2026 Major Requirements		CR	GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9		36 cr. min
MAJOR REQUIREMENTS	94-95		1. Written English (6 cr. min)	ENGL 1101	3
CET 1111: Beginning CAD	3			ENGL 1102	3
CET 1112: Beginning Surveying OR CE 3301: Surveying	3		2. Spoken English (3 cr. min)	COMM 1101	3
			3. Mathematics (3 cr. min)	MATH 1153	3
CET 1121: Civil 3D Drafting	3		4. Humanities, Fine Arts, Foreign Lang. (2 courses; 2 categories; 6 cr. min)		
CET 1122: Intermediate Surveying and Spatial Analysis	3		PHIL 1103: Introduction to Ethics		3
CET 2216: Route Survey and GPS Fundamentals	3		Any from a different category		3
CET 2220: Statics and Strength of Materials	3		5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min)		
CET 2226: Construction Surveying	3		PHYS 1101: Elements of Physics		3
CET 2228: Principles of GIS	3		PHYS 1101L: Elements of Physics Laboratory		1
CET 2232: Plan Reading and Worksite Safety	3		Any with a different prefix than PHYS		3
CET 2243: Public Works	3		6. Behavioral and Social Science (2 courses-different prefixes; 6 cr. min)		
CET 2251: Introduction to Legal Descriptions	1		Any		3
ENGL 3307: Professional and Technical Writing	3		Any with a different prefix than first		3
GEMT 3310: Boundary Control and Legal Principles	3		One Course from EITHER Objective 7 OR 8 (1 course; 3 cr. min)		
GEMT 3311: Advanced Surveying	3		7. Critical Thinking		3
GEMT 3312: Public Land Surveying	3		8. Information Literacy		
GEMT 3313: Surveying Software Applications	3		9. Cultural Diversity (1 course; 3 cr. min)		
GEMT 3314: Research and Evidence in Surveying	3		Any		3
GEMT 3315: Surveying Adjustments	3		General Education Elective to reach 36 cr. min. (if necessary)		
GEMT 3317: Subdivision Planning and Platting	2				
GEMT 3319: Writing Legal Descriptions	1		Total GE		37
GEMT 4400: Essentials of Surveying	2		Undergraduate Catalog and GE Objectives by Catalog Year http://coursecat.isu.edu/undergraduate/programs/		
GEMT 4404: Advanced Geographic Information Systems OR GEMT 4425: Principles of Cartography OR GEMT 4427: Information Technology for GIS	3				
GEMT 4409: Remote Sensing OR GEMT 4432: Principles of Photogrammetry	3		MAP Credit Summary		CR
GEMT 4411: Geodesy	3		Major		94-95
GEMT 4415: Survey Office Practice	3		General Education		37
GEMT 4416: Surveying Project	2		Upper Division Free Electives to reach 36 credits		0
GEMT 4430: GPS Principles and Applications	3		Free Electives to reach 120 credits		0
MATH 1153: Statistical Reasoning (counted in GE Obj. 3)			TOTAL		131-132
MATH 1170: Calculus I	4				
MATH 1175: Calculus II	4				
PHIL 1103: Introduction to Ethics (counted in GE Obj. 4)					
*Complete either the following two courses:	7-8				
CET 1115A: Materials Testing I	4		Graduation Requirement Minimum Credit Checklist		Confirmed
CET 1125A: Materials Testing II	4		Minimum 36 cr. General Education Objectives (15 cr. AAS)		X
Or complete the following three courses:			Minimum 15 cr. Upper Division in Major (0 cr. Associate)		X
CET 1113: Civil and Geomatics Engineering Technology I	2		Minimum 36 cr. Upper Division Overall (0 cr. Associate)		X
CET 1123: Civil and Geomatics Engineering Technology II	2		Minimum of 120 cr. Total (60 cr. Associate)		X
CET 2215: Materials Theory	3				
*Complete either the following two courses:	5		MAP Completion Status (for internal use only)		
MATH 1143: Precalculus I: Algebra	3			Date	
MATH 1144: Precalculus II: Trigonometry	2				
Or complete the following course:			CAA or COT:	GR 07/24/2025	
MATH 1147: Precalculus	5				
Advising Notes			Complete College American Momentum Year Math and English course in first year-Specific GE MATH course identified 9 credits in the Major area in first year 15 credits each semester (or 30 in academic year) Milestone courses		
We do not accept other related degrees to satisfy the first part (CET) of the 2+2 BS degree. However, if the transfer degree is recognized as a substitute for the first part of the 2+2 degree, there may be prerequisite courses from the CET degree that need to be taken prior to participation in the BS degree.					