



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: Any	3	D-	GE			
CET 1111: Beginning CAD	3	C-		F, S	Minimum score of ALEKS 30 or equivalent	
CET 1112: Beginning Surveying AND CET 1112L: Beginning Surveying Laboratory OR CE 3301: Surveying	3	C-		F, S F, D	MATH 1143 or 1147 or 1170 MATH 1170	MATH 1143 or 1147 or 1170
*CET 1115: Materials Testing I: Aggregate and Soils for Construction (early 8 weeks) OR CET 1113: Civil and Geomatics Engineering Technology I	2	C-		F, D	Minimum score of ALEKS 30 or equivalent	
*MATH 1143: Precalculus I: Algebra OR MATH 1147: Precalculus	3 5	D-		F, S, Su F, S	Appropriate placement score	
Total	14-18					
Semester Two (CET)						
GE Objective 2: COMM 1101 Fundamentals of Oral Communication	3	D-	GE	F, S		
GE Objective 6: Any	3	D-	GE			
CET 1121: Civil 3D Drafting	3	C-		F, S	CET 1111	
CET 1122: Intermediate Surveying	2	C-		F, S	CET 1112 or CE 3301 and MATH 1144 or 1147 or 1170	MATH 1144 or 1147 or 1170
CET 1122L: Intermediate Surveying Laboratory	1	C-		F, S	CET 1112 or CE 3301 and MATH 1144 or 1147 or 1170	MATH 1144 or 1147 or 1170
*CET 1125: Materials Testing II: Embankment and Base and In-Place (early 8 weeks) OR CET 1123: Civil and Geomatics Engineering Technology II	2	C-		S, D	CET 1115 or instructor permission Minimum score of ALEKS 30 or equivalent	CET 1115 or instructor permission
*MATH 1144: Precalculus II: Trigonometry OR MATH 1147: Precalculus (if needed)	2 0-5	D-		F, S, Su	MATH 1143 with a C- or higher or appropriate placement score Appropriate placement score	
Total	14-21					
Semester Three (CET)						
GE Objective 5: PHYS 1101/L Elements of Physics and Laboratory (Recommended)	4	D-	GE	F, S	MATH 1108 or equivalent	MATH 1108 or equivalent
CET 2216: Route Survey and GNSS Fundamentals	3	C-		F, S	CET 1121, 1122, and MATH 1144 or 1147 or 1170	
CET 2228: Principles of GIS	3	C-		S, D	Minimum score of ALEKS 30 or equivalent	
CET 2232: Plan Reading and Worksite Safety	3	C-		F, D	Minimum score of ALEKS 30 or equivalent	
*CET 2235: Materials Testing IV: Specifications and Testing of Fresh Concrete (late 8 weeks) OR None	2 0	C-		F, D	Minimum score of ALEKS 30 or equivalent	
Total	13-16					
Semester Four (CET)						
GE Objective 3: MATH 1153 Statistical Reasoning	3	D-	GE	F, S, Su	Appropriate placement score	
CET 2220: Statics and Strength of Materials	3	C-		S	MATH 1144 or 1147 or 1170	
*CET 2225: Materials Testing III: Specifications and Testing of Asphalt Pavement (late 8 weeks) OR CET 2215: Materials Theory	2 3	C-		S, D F, D	CET 1115, 1125, or instructor permission MATH 1143 AND 1144, or 1147, or 1170	MATH 1144
CET 2226: Construction Surveying	3	C-		S, D	CET 1122 and MATH 1144 or 1147 or 1170	
CET 2243: Public Works	3	C-		S, D	MATH 1143 and MATH 1144 or 1147 or 1170	MATH 1144 or 1147 or 1170
CET 2251: Introduction to Legal Descriptions	1	C-		F, S		
GEMT 3313: Surveying Software Applications	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	MATH 1144 or 1147 or 1170
Total	16					

Course Subject and Title	Credits	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester Five						
GE Objective 1: Any	3	D-	GE			
GEMT 3311: Advanced Surveying	3	C-	UM	F, D	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 3312: Public Land Surveying	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 3317: Subdivision Planning and Platting	2	C-	UM	F, D	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 4430: GPS Principles and Applications	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	
MATH 1170: Calculus I	4	D-		F, S, Su	MATH 1144 or 1147 with a C- or higher, or appropriate placement score	
Total	18					
Semester Six						
GE Objective 7 or 8: Any	3	D-	GE			
GEMT 3310: Boundary Control and Legal Principles	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 3314: Research and Evidence in Surveying	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 4411: Geodesy	3	C-	UM	F, S	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 4415: Survey Office Practice	3	C-	UM	F, D	CET 1122 and MATH 1144 or 1147 or 1170	
MATH 1175: Calculus II	4	D-	UM	F, S, Su	MATH 1170 with a C- or higher	
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		
GE Objective 5: Any course not in PHYS	3	D-	GE			
ENGL 3307: Professional and Technical Writing	3	C-	UM	F, S	45 credits and ENGL 1102 with a C- or higher	
GEMT 3315: Surveying Adjustments	3	C-	UM	F, S	CET 2226, MATH 1153, 1170	
GEMT 3319: Writing Legal Descriptions	1	C-	UM	F, D	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 4416: Surveying Project	2	C-	UM	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 9: Any	3	D-	GE			
GEMT 4432: Principles of Photogrammetry OR GEOL 4409: Remote Sensing	3	C-	UM	S, D D	CET 1122 and MATH 1144 or 1147 or 1170	
GEMT 4400: Essentials of Surveying	2	C-	UM	F, S	Senior standing, completion of Academic Certificate in Land Surveying, or instructor permission	
GEMT 4425: Principles of Cartography OR GEOL 4404: Advanced Geographic Information Systems OR GEOL 4427: Information Technology for GIS	3	C-	UM	S, D F, S S	CET 1122, 2228, and MATH 1144 or 1147 or 1170 GEOL 4403/L or instructor permission 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.)						

2026-2027 Major Requirements		CR	GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9	30 cr. min
MAJOR REQUIREMENTS		94-95	1. Written English (6 cr. min) AAS - Any	3
CET 1111: Beginning CAD		3	Any	3
CET 1112: Beginning Surveying AND CET 1112L: Beginning Surveying Laboratory OR CE 3301: Surveying		3	2. Spoken English (3 cr. min) AAS - Any	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		2	PHIL 1103: Introduction to Ethics	3
CET 1122L: Intermediate Surveying Laboratory		1	Any in a different category	3
CET 2216: Route Survey and GNSS Fundamentals		3	5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min)	
CET 2220: Statics and Strength of Materials		3	AAS - PHYS 1101: Elements of Physics	3
CET 2226: Construction Surveying		3	AAS - PHYS 1101L: Elements of Physics Laboratory	1
CET 2228: Principles of GIS		3	Any with a different prefix than PHYS	3
CET 2232: Plan Reading and Worksite Safety		3	6. Behavioral and Social Sciences (2 courses-different prefixes; 6 cr. min)	
CET 2243: Public Works		3	AAS - Any	3
CET 2251: Introduction to Legal Descriptions		1	Any with a different prefix than first	3
ENGL 3307: Professional and Technical Writing		3	One Course from EITHER Objective 7 OR 8 (1 course; 3 cr. min)	
GEMT 3310: Boundary Control and Legal Principles		3	7. Critical Thinking Any or GE Obj. 8	3
GEMT 3311: Advanced Surveying		3	8. Information Literacy Any or GE Obj. 7	
GEMT 3312: Public Land Surveying		3	9. Cultural Diversity (1 course; 3 cr. min)	
GEMT 3313: Surveying Software Applications		3	Any	3
GEMT 3314: Research and Evidence in Surveying		3	General Education Elective to reach 36 cr. min.	
GEMT 3315: Surveying Adjustments		3		
GEMT 3317: Subdivision Planning and Platting		2	Total GE	37
GEMT 3319: Writing Legal Descriptions		1	Undergraduate Catalog and GE Objectives by Catalog Year	
GEMT 4400: Essentials of Surveying		2		
GEMT 4411: Geodesy		3		
GEMT 4415: Survey Office Practice		3		
GEMT 4416: Surveying Project		2		
GEMT 4425: Principles of Cartography OR GEOL 4404: Advanced Geographic Information Systems OR GEOL 4427: Information Technology for GIS		3	MAP Credit Summary	CR
			Major	94-95
			General Education	37
			Upper Division Free Electives to reach 36 credits	0
GEMT 4430: GPS Principles and Applications		3	Free Electives to reach 120 credits	0
GEMT 4432: Principles of Photogrammetry OR GEOL 4409: Remote Sensing		3	TOTAL	131-132
MATH 1153: Statistical Reasoning (counted in GE Obj. 3)				
MATH 1170: Calculus I		4		
MATH 1175: Calculus II		4		
PHIL 1103: Introduction to Ethics (counted in GE Obj. 4)			Graduation Requirement Minimum Credit Checklist	Confirmed
€CET 1115 and CET 1125 and CET 2225 and CET 2235 OR CET 1113 and CET 1123 and CET 2215		7-8	Minimum 36 cr. General Education Objectives (15 cr. AAS)	X
			Minimum 15 cr. Upper Division in Major (0 cr. Associate)	X
*MATH 1143 and MATH 1144 OR MATH 1147		5	Minimum 36 cr. Upper Division Overall (0 cr. Associate)	X
			Minimum of 120 cr. Total (60 cr. Associate)	X
Advising Notes			MAP Completion Status (for internal use only)	
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.			Date	
			CAA or COT:	GR 07/07/2026
			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	