



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	Cr.	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester One						
ESET 1140: Applied Technical Intermediate Algebra	5	C-		F, S, D	Minimum ALEKS score of 30 or equivalent	
ESET 1181: Introduction to Cyber-Physical Systems	3	C-		F, D		
ESET 1182: Information Technology Fundamentals	3	C-				
Total	11					
Semester Two						
ESET 1121: Basic Electricity and Electronics	4	C-		F, S		ESET 1121L
ESET 1121L: Basic Electricity and Electronics Laboratory	3	C-		F, S		ESET 1121
Total	7					
Semester Three						
GE Objective 1: ENGL 1101 Writing and Rhetoric I OR ENGL 1102 Writing and Rhetoric II	3	D-	GE	F, S, Su	Appropriate placement score	
GE Objective 5: PHYS 1101/L Elements of Physics and Lab (Recommended) OR CHEM 1100 Concepts of Chemistry OR CHEM 1111/L General Chemistry I and Lab OR CHEM 1112/L General Chemistry II and Lab OR PHYS 1100 Essentials of Physics OR PHYS 1111/1113 General Physics I and Lab OR PHYS 1112/1114 General Physics II and Lab	4-5	D-	GE		Appropriate placement score	
ESET 1162: Industrial Safety and Regulations	2	C-		F, S, D		
Total	9-10					
Semester Four						
GE Objective 3: MGT 2216 Business Statistics (Recommended) OR MATH 1143 Precalculus I: Algebra OR MATH 1147 Precalculus OR MATH 1153 Statistical Reasoning OR MATH 1160 Survey of Calculus OR MATH 1170 Calculus I	3-5	D-	GE		Appropriate placement score	
ESET 1120: Introduction to Energy Systems	2	C-		F, S, D		ESET 1120L
ESET 1120L: Introduction to Energy Systems Laboratory	1	C-		F, S, D		ESET 1120
ESET 1122: Electrical Systems and Motor Control Theory	3	C-		F, S, D	ESET 1121/L or instructor approval	ESET 1122L
ESET 1122L: Electrical Systems and Motor Control Theory Laboratory	1	C-		F, S, D	ESET 1121/L or instructor approval	ESET 1122
Total	10-12					
Semester Five						
CYBR 3384: Risk Management for Cyber-Physical Systems	3	C-		F, D	ESET 1181 2223, 2227, 2282, CYBR 3383, or instructor approval	ESET 1181 2223, 2227, 2282, CYBR 3383, or instructor approval
ESET 2205: Fundamentals of Control Logic	3	C-		F, S, D	Instructor approval	
ESET 2282: Introduction to Networking	3	C-		F		
Total	9					
Semester Six						
GE Objective 2: Any	3	D-	GE			
GE Objective 6: ECON 2201 Principles of Macroeconomics (Recommended)	3	D-	GE	F, S, Su		
CYBR 4486: Network Security for Industrial Environments	3	C-		S, D	CYBR 3383, ESET 2282, or instructor approval	
Total	9					
Semester Seven						
CYBR 3383: Security Design for Cyber-Physical Systems	3	C-		F, D	ESET 1181, 2223, 2227, 2282, or instructor approval	ESET 1181, 2223, 2227, 2282, or instructor approval
CYBR 4410: Professional Foundations in Cybersecurity	3	C-		D		
ESET 2242: Practical Process Measurements and Control	2	C-		F, D	ESET 1122 or instructor approval	
Total	8					
Semester Eight						
CYBR 4481: Defending Critical Infrastructure and Cyber Physical Systems	3	C-		S, D	CYBR 3383, 3384, ESET 2282, or instructor approval	
CYBR 4487: Professional Development and Certification	3	C-		S, D	CYBR 3383, 3384, 4481, 4486	CYBR 3384, 4481, 4486
Total	6					

*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	15 cr. min
MAJOR REQUIREMENTS		53	1. Written English ENGL 1101 or ENGL 1102	3
CYBR 3383: Security Design for Cyber-Physical Systems		3		
CYBR 3384: Risk Management for Cyber-Physical Systems		3	2. Spoken English Any	3
CYBR 4410: Professional Foundations in Cybersecurity		3	3. Mathematics MGT 2216 (Recommended)	3-5
CYBR 4481: Defending Critical Infrastructure and Cyber Physical Systems		3	4. Humanities, Fine Arts, Foreign Lang.	
CYBR 4486: Network Security for Industrial Environments		3		
CYBR 4487: Professional Development and Certification		3	5. Natural Sciences	
ESET 1120: Introduction to Energy Systems		2	PHYS 1101/L: Elements of Physics and Lab (Recommended)	4-5
ESET 1120L: Introduction to Energy Systems Laboratory		1		
ESET 1121: Basic Electricity and Electronics		4		
ESET 1121L: Basic Electricity and Electronics Laboratory		3	6. Behavioral and Social Science	
ESET 1122: Electrical Systems and Motor Control Theory		3	ECON 2201: Principles of Macroeconomics (Recommended)	3
ESET 1122L: Electrical Systems and Motor Control Theory Laboratory		1		
ESET 1140: Applied Technical Intermediate Algebra		5	One Course from EITHER Objective 7 OR 8	
ESET 1162: Industrial Safety and Regulations		2	7. Critical Thinking	
ESET 1181: Introduction to Cyber-Physical Systems		3	8. Information Literacy	
ESET 1182: Information Technology Fundamentals		3	9. Cultural Diversity	
ESET 2205: Fundamentals of Control Logic		3		
ESET 2242: Practical Process Measurements and Control		2	General Education Elective to reach 36 cr. min.	
ESET 2282: Introduction to Networking		3		
			Total GE	16-19
ENGL 1101 OR ENGL 1102 (counted in GE Obj. 1)			Undergraduate Catalog and GE Objectives by Catalog Year http://coursecat.isu.edu/undergraduate/programs/	
MATH 1143 OR MATH 1147 OR MATH 1153 OR MATH 1160 OR MATH 1170 OR MGT 2216 (counted in GE Obj. 3)				
CHEM 1100 OR CHEM 1111/L OR CHEM 1112/L OR PHYS 1100 OR PHYS 1101/L OR PHYS 1111/1113 OR PHYS 1112/1114 (counted in GE Obj. 5)				
			MAP Credit Summary	CR
			Major	53
			General Education	16-19
			Upper Division Free Electives to reach 36 credits	0
			Free Electives to reach 120 credits	0
			TOTAL	69-72
			Graduation Requirement Minimum Credit Checklist	Confirmed
			Minimum 36 cr. General Education Objectives (15 cr. AAS)	X
			Minimum 15 cr. Upper Division in Major (0 cr. Associate)	X
			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)	
				Date
			CAA or COT:	GR 06/29/2026
			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	