



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-Requirement
Semester One						
ESET 1100: Engineering Technology Orientation AND ESET 1100L: Intro to an Industrial Environment Lab OR ESET 1162: Industrial Safety and Regulations	2	C-		F, S, D	Minimum score of 30 on ALEKS or equivalent	
ESET 1118: Industrial Maintenance Mechanic I	2	C-				ESET 1118L
ESET 1118L: Industrial Maintenance Mechanic Lab I	1	C-		F, D		ESET 1118
ESET 1123: Mechanical Power Transmission I	2	C-		F, D		ESET 1123L
ESET 1123L: Mechanical Power Transmission Lab I	2	C-		F, D		ESET 1123
ESET 1140 (Recommended) OR MATH 1143 and MATH 1144 OR MATH 1147	5	C-			Appropriate test score	
ESET 2246: Materials and Metallurgy	2	C-		F, D		
Total	16					
Semester Two						
ESET 1119: Industrial Maintenance Mechanic II	2	C-		S, D	ESET 1118	ESET 1119L
ESET 1119L: Industrial Maintenance Mechanic Lab II	1	C-		S, D		ESET 1119
ESET 1121: Basic Electricity and Electronics	4	C-		F, S		ESET 1121L
ESET 1121L: Basic Electricity and Electronics Lab	3	C-		F, S		ESET 1121
ESET 1125: Introduction to Structural Welding	1	C-		S, D		
ESET 1126: Intro to Mechanical Drafting and CAD	1	C-		S, D		
ESET 1127: Mechanical Power Transmission II	2	C-		S, D	ESET 1123/L or instructor permission	ESET 1127L
ESET 1127L: Mechanical Power Transmission Lab II	2	C-		S, D		ESET 1127
Total	16					
Semester Three						
ESET 1122: Electrical Systems and Motor Control Theory	3	C-		F, S, D	ESET 1121/L	ESET 1122L
ESET 1122L: Electrical Systems and Motor Control Theory Lab	1	C-		F, S, D		ESET 1122
ESET 1117: Introduction to Industrial Thermal Systems AND ESET 1117L: Introduction to Industrial Thermal Systems Lab OR ESET 2220: Thermal Cycles and Heat Transfer	2-3	C-		F, D		
ESET 2243: Hydraulic and Pneumatic Power	2	C-		S, D		ESET 2243L
ESET 2243L: Hydraulic and Pneumatic Power Lab	2	C-		S, D		ESET 2243
Total	10-11					

*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.)

2024-2025 Major Requirements	CR	GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9	0 cr. min
MAJOR REQUIREMENTS	42-43	1. Written English	
ESET 1100: Engineering Technology Orientation AND ESET 1100L: Introduction to an Industrial Environment Lab OR ESET 1162: Industrial Safety and Regulations	2	2. Spoken English 3. Mathematics	
ESET 1117: Introduction to Industrial Thermal Systems AND ESET 1117L: Introduction to Industrial Thermal Systems Lab OR ESET 2220: Thermal Cycles and Heat Transfer	2-3	4. Humanities, Fine Arts, Foreign Lang.	
ESET 1118: Industrial Maintenance Mechanic I	2	5. Natural Sciences	
ESET 1118L: Industrial Maintenance Mechanic Lab I	1		
ESET 1119: Industrial Maintenance Mechanic II	2		
ESET 1119L: Industrial Maintenance Mechanic Lab II	1		
ESET 1121: Basic Electricity and Electronics	4	6. Behavioral and Social Science	
ESET 1121L: Basic Electricity and Electronics Lab	3		
ESET 1122: Electrical Systems and Motor Control Theory	3		
ESET 1122L: Electrical Systems and Motor Control Theory Lab	1	One Course from EITHER Objective 7 OR 8	
ESET 1123: Mechanical Power Transmission I	2	7. Critical Thinking	
ESET 1123L: Mechanical Power Transmission Lab I	2	8. Information Literacy	
ESET 1125: Introduction to Structural Welding	1	9. Cultural Diversity	
ESET 1126: Introduction to Mechanical Drafting and Computer Aided Design	1	General Education Elective to reach 36 cr. min. (if necessary)	
ESET 1127: Mechanical Power Transmission II	2		
ESET 1127L: Mechanical Power Transmission Lab II	2	Total GE	0
ESET 1140: Applied Technical Intermediate Algebra OR MATH 1143: Precalculus I: Algebra AND MATH 1144: Precalculus II: Trigonometry OR MATH 1147: Precalculus	5	Undergraduate Catalog and GE Objectives by Catalog Year http://coursecat.isu.edu/undergraduate/programs/	
ESET 2243: Hydraulic and Pneumatic Power	2		
ESET 2243L: Hydraulic and Pneumatic Power Lab	2	MAP Credit Summary	CR
ESET 2246: Materials and Metallurgy	2	Major	42-43
		General Education	0
		Upper Division Free Electives to reach 36 credits	0
		Free Electives to reach 120 credits	0
		TOTAL	42-43
		Graduation Requirement Minimum Credit Checklist	Confirmed
		Minimum 36 cr. General Education Objectives (15 cr. AAS)	
		Minimum 15 cr. Upper Division in Major (0 cr. Associate)	
		Minimum 36 cr. Upper Division Overall (0 cr. Associate)	
		Minimum of 120 cr. Total (60 cr. Associate)	
Advising Notes		MAP Completion Status (for internal use only)	
			<i>Date</i>
		CAA or COT:	EA 6/18/2024
		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	