



Catalog Year 2023-2024

ITC, Energy Systems Mechanical Engineering
Technology: Industrial Maintenance Mechanic

(For internal use only)

No change

UCC proposal

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 1100: Engineering Technology Orientation AND ESET 1100L: Engineering Technology Orientation Lab; OR ESET 1162: Industrial Safety and Regulations	2	C-		F, S, D F, S, D F, D		
ESET 1118: Industrial Maintenance Mechanic I	2	C-				ESET 1118L
ESET 1118L: Industrial Maintenance Mechanic I Lab	1	C-		F, D		ESET 1118
ESET 1123: Mechanical Power Transmission I	2	C-		F, D		ESET 1123L
ESET 1123L: Mechanical Power Transmission I Lab	2	C-		F, D		ESET 1123
ESET 1140: Applied Technical Intermediate Algebra (recommend); OR MATH 1143: College Algebra AND MATH 1144: Trigonometry; OR MATH 1147: College Algebra and Trigonometry	5	C-		F, S, D F, S, Su F, S		
ESET 2246: Metals 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 II Lab	1	C-		S, D		ESET 1119
ESET 1121: Basic Electricity and Electronics	4	C-		S, F		ESET 1121L
ESET 1121L: Basic Electricity and Electronics Lab	3	C-		S, F		ESET 1121
ESET 1125: Introduction to Structural Welding	1	C-		S, D		
ESET 1126: Intro to Mech Drafting and CAD	1	C-		S, D		
ESET 1127: Mechanical Power Transmission II	2	C-		S, D	ESET 1123, ESET 1123L	ESET 1127L
ESET 1127L: Mechanical Power Transmission II Lab	2	C-		S, D		ESET 1127
Total	16					
Semester Three						
ESET 1122: Electrical Systems and Motor Control	3	C-		S, F, D	ESET 1121, ESET 1121L	ESET 1122L
ESET 1122L: Electrical Systems and Motor Control Lab	1	C-		S, F, D		ESET 1122
Choose 2 Credits from the following: ESET 1117: Intro to Industrial Thermal Systems (1 Cr) AND ESET 1117: Intro to Industrial Thermal Systems Lab (2 Cr); OR ESET 2220: Thermal Cycles and Heat Transfer (2 Cr)	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.)						

2023-2024 Major Requirements	42-43	GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9		36 cr. min
MAJOR REQUIREMENTS				
ESET 1100: Engineering Technology Orientation AND ESET 1100L: Engineering Technology Orientation Lab; OR ESET 1162: Industrial Safety and Regulations	2	1. Written English (6 cr. min)		
Choose 2 Credits from the following: ESET 1117: Intro to Industrial Thermal Systems (1 Cr) AND ESET 1117: Intro to Industrial Thermal Systems Lab (2 Cr); OR ESET 2220: Thermal Cycles and Heat Transfer (2 Cr)	2-3	2. Spoken English (3 cr. min)	Recommended by Dept	
ESET 1118: Industrial Maintenance Mechanic I	2	4. Humanities, Fine Arts, Foreign Lang. (2 courses; 2 categories; 6 cr. min)		
ESET 1118L: Industrial Maintenance Mechanic I Lab	1			
ESET 1119: Industrial Maintenance Mechanic II	2	5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min)		
ESET 1119L: Industrial Maintenance Mechanic II Lab	1			
ESET 1121: Basic Electricity and Electronics	4	6. Behavioral and Social Science (2 courses-different prefixes; 6 cr. min)		
ESET 1121L: Basic Electricity and Electronics Lab	3			
ESET 1122: Electrical Systems and Motor Control	3	One Course from EITHER Objective 7 OR 8		(1 course; 3 cr. min)
ESET 1122L: Electrical Systems and Motor Control Lab	1	7. Critical Thinking		
ESET 1123: Mechanical Power Transmission I	2	8. Information Literacy		
ESET 1123L: Mechanical Power Transmission I Lab	2	9. Cultural Diversity (1 course; 3 cr. min)		
ESET 1125: Introduction to Structural Welding	1			
ESET 1126: Intro to Mech Drafting and CAD	1	General Education Elective to reach 36 cr. min. (if necessary)		
ESET 1127: Mechanical Power Transmission II	2			
ESET 1127L: Mechanical Power Transmission II Lab	2	Total GE		0
ESET 1140: Applied Technical Intermediate Algebra (Recommended); OR MATH 1143: College Algebra AND MATH 1144: Trigonometry; OR MATH 1147: College Algebra and Trigonometry	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			
ESET 2246: Metals and Metallurgy	2	MAP Credit Summary		CR
		Major		42-43
		General Education		
		Upper Division Free Electives to reach 36 credits		
		Free Electives to reach 120 credits		
		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)		
			Date	
		OAA or COT:	PJ 3/29/23	
		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		