

Catalog Year 2023-2024

ITC, Industrial Cybersecurity Engineering Technology

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☐ 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		Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester One						
ESET 1162: Industrial Safety and Regulations	2	C-		F, S, D		
ESET 2205: Fundamentals of Control Logic		C-		F, S, D	Permission of instructor	
ESET 1182: Information Technology Fundamentals		C-		F, S	Minimum score of 30 on ALEKS or equivalent	
ESET 2282: Introduction to Networking		C-		F		
CYBR 3383: Security Design for Cyber-Physical Systems		C-		F, D		ESET 1181, 2282, 2223, 2227, or instructor approval
CYBR 3384: Risk Management for Cyber-Physical Systems		C-		F, D		ESET 1181, 2282, 2223, 2227, 3383
Total	17					
Semester Two						
ESET 1120: Introduction to Energy Systems	2	C-		F, S, D		ESET 1120L
ESET 1120L: Introduction to Energy Systems Lab	1	C-		F, S, D		ESET 1120
ESET 2242: Practical Process Measurements and Control OR ESET 2222: Process Control Theory AND ESET 2226: Process Control Devices Laboratory	3 1	C-		F, D F, S, D	ESET 1122 or permission of instructor	
CYBR 4481: Defending Critical Infrastructure and Cyber Physical Systems	3	C-		S, D	ESET 2282, CYBR 3383, 3384, or instructor approval	
CYBR 4486: Network Security for Industrial Environments	3	C-		S, D	ESET 2282, CYBR 3383, or instructor approval	
CYBR 4487: Professional Development and Certification	3	C-		S, D	CYBR 3383 and 3384	CYBR 4486 and 4481
INFO 4411: Intermediate Information Assurance		C-		D	INFO 1150 or CS 1337 or INFO 3310 or instructor approval	
Total	17-19	9				

^{*}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.)

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2023-2024 Major Requirements		GENERAL EDUCATION OBJECTIVES				
2025-2024 Major Requirements	CR	Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9		min		
MAJOR REQUIREMENTS		1. Written English (6 cr. min) ENGL 1101				
ESET 1120: Introduction to Energy Systems			ENGL 1102			
ESET 1120L: Introduction to Energy Systems Lab		2. Spoken English (3 cr. min) COMM 13				
ESET 1162: Industrial Safety and Regulations		3. Mathematics (3 cr. m				
ESET 1182: Information Technology Fundamentals		4. Humanities, Fine Arts, Fo	s; 6 cr. min)			
SET 2205: Fundamentals of Control Logic						
ESET 0242: Practical Process Measurements and Control						
OR		5. Natural Sciences (2)	ectures-different course prefixes, 1 la	b; 7 cr. min)		
ESET 0222: Process Control Theory AND ESET 0226: Process Control Devices Laboratory						
· · · · · · · · · · · · · · · · · · ·						
ESET 2282: Introduction to Networking	3	6. Behavioral and Social Sc	ience (2 courses-different prefixe	s; 6 cr. min)		
CYBR 3383: Security Design for Cyber-Physical Systems	3					
CYBR 3384: Risk Management for Cyber-Security Systems	3					
CYBR 4481: Defending Critical Infrastructure & Cyber Physical Systems						
CYBR 4486: Network Security for Industrial Environments		One Course from EITHER C	bjective 7 OR 8 (1course	e; 3 cr. min)		
CYBR 4487: Professional Development and Certification	3	7. Critical Thinking				
INFO 4411: Intermediate Information Assurance	3	8. Information Literacy				
		9. Cultural Diversity	(1 cours	e; 3 cr. min)		
		General Education Elective	to reach 26 or min	:f		
		General Education Elective	to reach 36 cr. min.	if necessary)		
			Total (3F		
		Undergraduate Catalog and	d GE Objectives by Catalog Year	JL		
		http://coursecat.isu.edu/undergraduate/programs/				
		MAP Credit Summary	CR			
		Major	34-36			
		General Education	0			
		Upper Division Free Elec	0			
		Free Electives to reach 120 credits		0		
			34-36			
			-			
		Graduation Requiremen	nt Minimum Credit Checklist	Confirmed		
		_	neral 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)			
		William of 120 cf. Fotal (60 cf. 7530cfate)				
Advising Notes		MAP Completion Status (for internal use only)				
Advising Notes		war completion status				
			Date			
			21.24.42.22			
		CAA or COT:	PJ 6/1/2023			
		Complete College American Momentum Year				
Math and English course in first year-Specific GI			e in first year-Specific GE MATH co	urse		
		identified				
		9 credits in the Major area in first year 15 credits each semester (or 30 in academic year)				
			er (or 30 in academic year)			
		Milestone courses				

Form Revised 9.10.2019