Idaho State University

Catalog Year 2026-2027
Specialized Certificate, Industrial Controls

(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 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		
IAET 2000: Fundamentals of Measurement and Control	2	C-		F, S, D	ESET 1100, 1101	IAET 2000L
IAET 2000L: Fundamentals of Measurement and Control Laboratory	1	C-		F, S, D	ESET 1100L, 1101L	IAET 2000
IAET 2050: Introduction to Automation	3	C-		F, S, D	ESET 1100, 1101, 1140	IAET 2050L
IAET 2050L: Introduction to Automation Laboratory	4	C-		F, S, D	ESET 1100L, 1101L	IAET 2050
Total	18					
Semester Two						
IAET 2100: Motor Control Theory	4	C-		F, S	ESET 1181, IAET 2000, 2050	IAET 2100L
IAET 2100L: Motor Control Laboratory	2	C-		F, S, D	IAET 2000L, 2050L	IAET 2100
IAET 3000: PLC Programming Theory	2	C-		F, S, D	ESET 1181, IAET 2000, 2050, 2100	IAET 2100, 3000L
IAET 3000L: PLC Programming Laboratory	4	C-		F, S, D	IAET 2000L, 2050L, 2100L	IAET 2100L, 3000
Total	12					
Semester Three						
IAET 3100: Process Measurement Theory	3	C-		F, S, D	IAET 2100, 3000	IAET 3100L
IAET 3100L: Process Measurement Laboratory	2	C-		F, S, D	IAET 2100L, 3000L	IAET 3100
IAET 3150: Process Control Theory	4	C-		F, S, D	IAET 2100, 3000, 3100	IAET 3100, 3150L, 3200
IAET 3150L: Process Control Laboratory	3	C-		F, S, D	IAET 2100L, 3000L, 3100	IAET 3100, 3150, 3200
IAET 3200: Industrial Networking	2	C-		F, S, D	IAET 3000	IAET 3150, 3150L
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
MAJOR REQUIREMENTS	**44**
ESET 1140: Applied Technical Intermediate Algebra	5
ESET 1181: Introduction to Cyber-Physical Systems	3
IAET 2000: Fundamentals of Measurement and Control	2
IAET 2000L: Fundamentals of Measurement and Control Laboratory	1
IAET 2050: Introduction to Automation	3
IAET 2050L: Introduction to Automation Laboratory	4
IAET 2100: Motor Control Theory	4
IAET 2100L: Motor Control Laboratory	2
IAET 3000: PLC Programming Theory	2
IAET 3000L: PLC Programming Laboratory	4
IAET 3100: Process Measurement Theory	3
IAET 3100L: Process Measurement Laboratory	2
IAET 3150: Process Control Theory	4
IAET 3150L: Process Control Laboratory	3
IAET 3200: Industrial Networking	2

GENERAL EDUCATION OBJECTIVES **Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9**	**0 cr. min**
1. Written English	
2. Spoken English	
3. Mathematics	
4. Humanities, Fine Arts, Foreign Lang.	
5. Natural Sciences	
6. Behavioral and Social Science	
One Course from EITHER Objective 7 OR 8	
7. Critical Thinking	
8. Information Literacy	
9. Cultural Diversity	
General Education Elective to reach 36 cr. min.	
Total GE	**0**

Undergraduate Catalog and GE Objectives by Catalog Year
http://coursecat.isu.edu/undergraduate/programs/

MAP Credit Summary	**CR**
Major	44
General Education	0
Upper Division Free Electives to reach 36 credits	0
Free Electives to reach 120 credits	0
TOTAL	44

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
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

Form Revised 2.14.2023