



Catalog Year 2026-2027				(For internal use only)
BAS, Robotics Engineering Technology				☒ No change
Requires AAS in Robotics and Communications				☐ UCC proposal
Systems Engineering Technology before admission				

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 - AAS						
GE Objective 1: ENGL 1101 Writing and Rhetoric I	3	D-	GE	F, S, Su	Appropriate placement score	
RCET 1153A: Basic Electricity and DC Circuit Theory	4	C-		F, S	Minimum score of ALEKS 30 or equivalent	RCET 1153B
RCET 1153B: Basic Electricity and AC Circuit Theory	4	C-		F, S	RCET 1153A	RCET 1153A, 1155B
RCET 1155A: Basic Electricity and DC Circuit Lab	2	C-		F, S		RCET 1155B
RCET 1155B: Basic Electricity and AC Circuit Lab	2	C-		F, S	RCET 1155A	RCET 1153B, 1155A
Total	15					
Semester Two - AAS						
GE Objective 5: PHYS 1101 Elements of Physics AND PHYS 1101L Elements of Physics Laboratory OR PHYS 1100 Essentials of Physics OR PHYS 1111 General Physics I AND PHYS 1113 General Physics I Laboratory	4	D-	GE	F, S F, S F	Appropriate math score	
RCET 1154A: Analog Control Devices Theory	4	C-		F, S, D	RCET 1153A, 1153B, 1155A, 1155B	RCET 1156A
RCET 1154B: Digital Control Devices Theory	4	C-		F, S, D	RCET 1153B	RCET 1156B
RCET 1156A: Analog Control Devices Laboratory	2	C-		F, S, D	RCET 1153A, 1153B, 1155A, 1155B	RCET 1154A
RCET 1156B: Digital Control Devices Laboratory	2	C-		F, S, D	RCET 1155B	RCET 1154B
Total	16					
Semester Three - AAS						
GE Objective 3: RCET 1372 Calculus for Electronics	4	C-	GE	F, S	MATH 1144 or 1147 or RCET 1154A	
RCET 2251: Systems Analog and Digital Theory	6	C-		F, S	PHYS 1101/L, 1100, or 1111/1113	RCET 2253
RCET 2253: Systems Analog and Digital Laboratory	5	C-		F, S	RCET 1156B	RCET 2251
RCET 2271: Introduction to Lab Simulation Software	2	C-		F, S		
Total	17					
Semester Four - AAS						
GE Objective 1: ENGL 1102 Writing and Rhetoric II	3	D-	GE	F, S, Su	ENGL 1101/P or equivalent	
RCET 2265: Computer Fundamentals and Introduction to Programming	4	C-		F, S		
RCET 2267: Radio Frequency Transmission Theory	6	C-		F, S	RCET 1372, 2251, 2253	RCET 2268
RCET 2268: Radio Frequency Transmission Lab	5	C-		F, S	RCET 1372, 2251, 2253	RCET 2267
Total	18					
Semester Five - AAS						
GE Objective 2: COMM 1101 Fundamentals of Oral Communication	3	D-	GE	F, S		
RCET 3371: Advanced Programming Techniques and GUI Development	4	C-	UM	D	RCET 2265, 2271	
RCET 3373: Advanced Computer Architecture and Embedded Systems Theory	5	C-	UM	D	RCET 1154B, 2251	RCET 3375
RCET 3375: Advanced Computer Architecture and Embedded Systems Laboratory	5	C-	UM	D	RCET 1156B, 2253	RCET 3373
Total	17					
Semester Six - AAS						
GE Objective 6: TGE 1150 Applied Social Sciences in the Workplace (Recommended)	3	D-	GE	D		
RCET 3372: Advanced Applications of Calculus for Robotics	4	C-	UM		RCET 1372, PHYS 1101	
RCET 3374: Advanced Systems Analysis Theory	4	C-	UM	D	RCET 2251, 2267	RCET 3376
RCET 3376: Advanced Systems Analysis Theory	5	C-	UM	D	RCET 2253, 2268	RCET 3374
Total	16					
Semester Seven						
GE Objective 4: Any	3	D-	GE			
GE Objective 5: Any course besides PHYS	3	D-	GE			
GE Objective 7 or 8: Any	3	D-	GE			
ENGL 3307: Professional and Technical Writing	3	C-	UU	F, S	45 credits and ENGL 1102	
*Elective From Approved List	2-5	C-	UM			
Total	14-17					

Course Subject and Title	Cr.	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester Eight						
GE Objective 4: Any from different category than previous	3	D-	GE			
GE Objective 6: Any with different prefix than previous	3	D-	GE			
GE Objective 9: Any	3	D-	GE			
‡Elective From Approved List	2-5	C-	UM			
‡Elective From Approved List	2-5	C-	UM			
Total	13-19					
*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		36 cr. min
MAJOR REQUIREMENTS	92	1. Written English (6 cr. min)	AAS - ENGL 1101	3
ENGL 3307: Professional and Technical Writing	3		AAS - ENGL 1102	3
RCET 1153A: Basic Electricity and DC Circuit Theory	4	2. Spoken English (3 cr. min)	AAS - COMM 1101	3
RCET 1153B: Basic Electricity and AC Circuit Theory	4	3. Mathematics (3 cr. min)	AAS - RCET 1372	4
RCET 1154A: Analog Control Devices Theory	4	4. Humanities, Fine Arts, Foreign Lang. (2 courses; 2 categories; 6 cr. min)		
RCET 1154B: Digital Control Devices Theory	4	Any		3
RCET 1155A: Basic Electricity and DC Circuit Lab	2	Any from different category than previous		3
RCET 1155B: Basic Electricity and AC Circuit Lab	2	5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min)		
RCET 1156A: Analog Controls Devices Lab	2	AAS – PHYS 1101/L or 1100 or 1111/1113		4
RCET 1156B: Digital Control Devices Laboratory	2	Any from different prefix than previous		3
RCET 2251: Systems Analog and Digital Theory	6			
RCET 2253: Systems Analog and Digital Laboratory	5	6. Behavioral and Social Science (2 courses-different prefixes; 6 cr. min)		
RCET 2265: Computer Fundamentals and Introduction to Programming	4	AAS - TGE 1150 (Recommended)		3
		Any from different prefix		3
RCET 2267: Radio Frequency Transmission Theory	6	One Course from EITHER Objective 7 OR 8 (1course; 3 cr. min)		
RCET 2268: Radio Frequency Transmission Lab	5	7. Critical Thinking	Any or Obj. 8	3
RCET 2271: Introduction to Lab Simulation Software	2	8. Information Literacy	Any or Obj. 7	
RCET 3371: Advanced Programming Techniques and GUI Development	4	9. Cultural Diversity (1 course; 3 cr. min)		
		Any		3
RCET 3372: Advanced Applications of Calculus for Robotics	4	General Education Elective to reach 36 cr. min. (if necessary)		
RCET 3373: Advanced Computer Architecture and Embedded Systems Theory	5			
RCET 3374: Advanced Systems Analysis Theory	4			
RCET 3375: Advanced Computer Architecture and Embedded Systems Laboratory	5	Undergraduate Catalog and GE Objectives by Catalog Year http://coursecat.isu.edu/undergraduate/programs/		
RCET 3376: Advanced Systems Analysis Theory	5			
*Select a Minimum of 10 Credits from the Following:	10	MAP Credit Summary		CR
RCET 3331: Laser Systems and Optics Theory	4	Major		92
RCET 3332: Laser Systems and Optics Laboratory	3	General Education		38
RCET 3370: Electronic Drafting for PCB Design	3	Upper Division Free Electives to reach 36 credits		0
RCET 3382: Rapid Prototyping Technologies	2	Free Electives to reach 120 credits		0
RCET 3383: Advanced Laser Systems and Optics Theory	5		TOTAL	130
RCET 3384: Advanced Laser Systems and Optics Laboratory	3			
RCET 3396: Independent Study	1-8			
RCET 3398: Special Topics	1-8			
MGT or OLP Upper Division Courses Numbered 3300-4499				
		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 06/10/2026	
		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		