

Degree Plan Chart for Applied Aerospace Engineering Program (New/Revised)

Year	Credits	Course Schedule						Requirements Summary		
		1	2	3	4	5	6	General Education Requirements	Core Requirements	Elective Requirements
FRESHMAN YEAR	17 hrs.	CHEM 101 General Chemistry (4)	ENGL 101 Intro. To Acad. Discourse (3)	IAS 121 Language Foundation (2)	MATH 101 Calculus I (4)	PHYS 101 General Physics I (4)		58	47	17
	17 hrs.	ENGL 102 Intro. to Report Writing (3)	IAS 111 Belief & its Consequences (2)	ICS 104 Intro. to Prog. In Python & C (3)	MATH 102 Calculus II (4)	PHYS 102 General Physics II (1)	PE 101 Health & Physical Edu. I (4)			
		ENGL 101			MATH 101	PHYS 101				
SOPHOMORE YEAR	18 hrs.	AE 211 Fund. of Thermo-Fluids (3)	AE 221 Introduction to AE (3)	ENGL 214 Acad. & Prof. Comm. (3)	ISE 291 Intro. To Data Science (3)	MATH 201 Calculus III (3)	CE 201 Statics (3)	128 - Total Credit Hours		
		MATH 102, PHYS 102	PHYS 102	ENGL 102	ICS 104, MATH 102	MATH 102	PHYS 101			
	17 hrs.	AE 228 Intro. to AE Struct. & Mat. (3)	AE 230 AE Vehicle Performance (3)	COE 292 Intro. to Artificial Intel. (3)	IAS 212 Professional Ethics (2)	MATH 208 Intro. to Diff. Eq. & Lin. Alg. (3)	ME 201 Dynamics (3)			
		PHYS 101	MATH 102, PHYS 102	ISE 291	IAS 111	MATH 102	CE 201			
JUNIOR YEAR	18 hrs.	ME 210 ME Drawing and Graphics (3)	AE 313 AE Systems and Control (3)	AE 325 Gas Dynamics I (3)	AE 328 Flight Structure I (3)	MATH 371 Intro. to Num. Comp. (3)	AE 357 AE Numerical Methods Lab (1)	IAS XXX Islamic/Arabic Elective (2)		
			ME 201, MATH 208	AE 221	AE 228, MATH 201	MATH 201				
	17 hrs.	AE 312 Fundamentals of AE Design (1)	AE 333 Aerodynamics I (3)	AE 422 Flight Propulsion I (3)	BUS 200 Business & Entrep. (3)	GS xxx GS Elective (3)	XXX xxx Engineering Elective (3)	CGS 392 Career Essentials (1)		
	Junior standing	AE 221	AE 211							
SENIOR YEAR	6 hrs.	AE 398 AE Internship (6)								
		ENGL 214, AE 221, AOD								
	18 hrs.	AE 412 Senior Design (2)	AE 421 AE LAB (1)	AE 426 Flight Dynamics I (3)	AE 427 Aerospace Vehicle Design (3)	AE xxx AE Elective I (3)	AE xxx AE Elective II (3)	XXX xxx Science Elective (3)		
	AE 312	Senior standing	AE 221	Senior standing						

KEY

- Pre-Requisites
- ➔ Co-Requisites
- Credit Hours

58 General Education Requirements

47 Core Requirements

17 Elective Requirements

6 Technical Training

128 - Total Credit Hours