

Bachelor of Science in Aerospace Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Fall Semester
Total Degree Credit hours: 132

Semester	Course Code	Course Title	Cr	Course Type	Semester	Course Code	Course Title	Cr	Course Type
Year 1 1 (Fall)	MATH150	Calculus for Engineering	3	College Requirement	Year 1 2 (Spring)	MATH150	Calculus for Engineering	3	College Requirement
	GESE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency		PHYS110	General Physics I	3	College Requirement
	PHYS105	General Physics	3	College Requirement		PHYS140	General Physics Lab II	1	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		STAT110	Probability and Statistics	3	College Requirement
	CHEM111	General Chemistry I	3	College Requirement		MATH140	Linear Algebra I	3	College Requirement
CHEM175	Chemistry Lab for Engineering	1	College Requirement	GENE215	Engineering Ethics	3	College Requirement		
Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10						
Year 2 3 (Fall)	MATH275	Ordinary Differential Equations	3	College Requirement	Year 2 4 (Spring)	AERO115	Thermofluids	3	Specialization
	GENE230	Computer Programming	3	Specialization		MEC315	Geometric Modeling	2	Specialization
	GENE230	Engineering Thermodynamics	3	Specialization		MEC390	Engineering Materials	3	College Requirement
	CIVL240	Statics	3	Specialization		MEC310	Dynamics	3	Specialization
	AERO220	Aerospace Lab 1	1	Specialization		MEC395	Mechanics of Materials	3	Specialization
PHYS200	Introduction to Space Sciences	3	Specialization	MEC350	Introduction to Mechanics	3	Specialization		
MEC300	Introduction to Engineering Drawing and Workshop	1	Specialization						
Summer	AERO485	Internship I	1	Internship					
Year 3 5 (Fall)	AERO300	Aerodynamics 1	3	Specialization	Year 3 6 (Spring)	AERO350	Aerospace Lab 2	1	Specialization
	AERO305	Aircraft Propulsion	3	Specialization		AERO402	Aerodynamics 2	3	Specialization
	AERO310	Aircraft Structures 1	3	Specialization		MEC400	Dynamic Systems & Control	3	Specialization
	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10		GENE315	Engineering Economics	3	College Requirement
	AERO304	Aircraft Operations and Flight Mechanics	3	Specialization		AERO340	Space Mechanics	3	Specialization
AERO315	Aerospace Manufacturing Processes	3	Specialization	ELTE372	Electro-Mechanical Devices	3	Specialization		
Elective	Student choice	3							
					Summer	AERO490	Internship II	1	Internship
Year 4 7 (Fall)	AERO411	Flight Dynamics, Stability and Control	3	Specialization	Year 4 8 (Spring)	AERO496	Aircraft Design	3	Specialization
	AERO485	Design and Critical Thinking in Aerospace Engineering	3	Specialization		AERO500	Capstone Engineering Design Project	3	Specialization
	GENE410	Contemporary Global Studies	3	Gen. Ed. Theme 1: UAE National Identity		AERO450	Aerospace Lab 3	1	Specialization
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Gen. Ed. Theme 3: Innovation
	GENE222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship		Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
Elective	Student choice	3	Major Elective	Elective	Student choice	3	Major Elective		

Bachelor of Science in Aerospace Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Spring Semester
Total Degree Credit hours: 132

Semester	Course Code	Course Title	Cr	Course Type	Semester	Course Code	Course Title	Cr	Course Type	
Year 1 1 (Spring)	MATH150	Calculus for Engineering	3	College Requirement	Year 1 2 (Fall)	MATH150	Calculus I for Engineering	3	College Requirement	
	GESE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency		PHYS110	General Physics I	3	College Requirement	
	PHYS105	General Physics	3	College Requirement		PHYS140	General Physics Lab II	1	College Requirement	
	PHYS135	General Physics Lab I	1	College Requirement		STAT110	Probability and Statistics	3	College Requirement	
	CHEM111	General Chemistry I	3	College Requirement		GENE215	Engineering Ethics	3	College Requirement	
CHEM175	Chemistry Lab for Engineering	1	College Requirement	MATH140	Linear Algebra I	3	College Requirement			
Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10	GENE230	Computer Programming	3	College Requirement			
Year 2 3 (Spring)	MATH275	Ordinary Differential Equations	3	College Requirement	Year 2 4 (Fall)	AERO115	Thermofluids	3	Specialization	
	GENE230	Engineering Thermodynamics	3	Specialization		MEC390	Engineering Materials	3	Specialization	
	CIVL240	Statics	3	Specialization		MEC315	Geometric Modeling	2	Specialization	
	AERO220	Aerospace Lab 1	1	Specialization		MEC395	Mechanics of Materials	3	Specialization	
	PHYS200	Introduction to Space Sciences	3	Specialization		MEC310	Dynamics	3	Specialization	
MEC300	Introduction to Engineering Drawing and Workshop	1	Specialization	MEC350	Introduction to Mechanics	3	Specialization			
Year 3 5 (Spring)	AERO310	Aircraft Structures 1	3	Specialization	Year 3 Summer	AERO485	Internship I	1	Internship	
	AERO304	Aircraft Operations and Flight Mechanics	3	Specialization						
	AERO300	Aerodynamics 1	3	Specialization						
	AERO305	Aircraft Propulsion	3	Specialization						
	MEC400	Dynamic Systems & Control	3	Specialization						
Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10							
Year 4 6 (Fall)	AERO315	Aerospace Manufacturing Processes	3	Specialization	Year 4 7 (Spring)	AERO485	Design and Critical Thinking in Aerospace Engineering	3	Specialization	
	AERO350	Aerospace Lab 2	1	Specialization		AERO402	Aerodynamics 2	3	Specialization	
	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10		AERO496	Aircraft Design	3	Specialization	
	GENE315	Engineering Economics	3	Specialization		GENE410	Contemporary Global Studies	3	Gen. Ed. Theme 1: UAE National Identity	
	AERO340	Space Mechanics	3	Specialization		AERO450	Aerospace Lab 3	1	Specialization	
AERO411	Flight Dynamics, Stability and Control	3	Specialization	GENE222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship			
Elective	Student choice	3								
Summer	AERO490	Internship II	1	Internship						
Year 5 8 (Fall)	AERO500	Capstone Engineering Design Project	3	Specialization	Year 5 8 (Fall)	AERO500	Capstone Engineering Design Project	3	Specialization	
	Elective	Student choice	3	Gen. Ed. Theme 8: Innovation		Elective	Student choice	3	Major Elective	
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Major Elective	
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Major Elective	
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Major Elective	