

Curriculum

Aeronautical Engineering

Semester	Subjects	Credits
1	Linear algebra and calculus	4
	Engineering physics (integrated)	4
	Elements of mechanical engineering	3
	Engineering mechanics	3
	Python programming (integrated)	4
	Communicative English	1
	Samskrutika Kannada / Balake Kannada	1
2	Integral calculus and differential equation	4
	Engineering chemistry (integrated)	4
	Computer-Aided Engineering Drawing	3
	C programming (integrated)	4
	Introduction to drones	3
	Innovation and design thinking	1
	Constitution of India and professional ethics	1
3	Complex variables and probability	3
	Fluid Mechanics	4
	Solid Mechanics	4
	Aero thermodynamics	3
	Aerospace Materials & Digital Manufacturing	3
	Ability Enhancement Course - Introduction to Aeronautical Engineering	3
4	Transforms Calculus And Numerical Techniques	3
	Low Speed Aerodynamics -I	4
	Aircraft Propulsion	4
	Aircraft Structures – I	3
	Drone Technology	3
	Computer Aided Aircraft Drawing Lab	1
	System Engineering for Aeronautical Engineers	2
5	Management and Economics	3
	Aerodynamics-II (Integrated)	4
	Aircraft Structures –II (Integrated)	4
	Aerospace Propulsion	3
	Urban Air Mobility	2
	Environmental Science	1
6	Aircraft Performance	3
	Finite Element Methods	4
	Control Engineering	3
	Universal Human Values	1
	Mini Project	2
	Flight Simulation Lab	1
7	Aircraft Stability and Control	3
	Avionics	3
	Computational Fluid Dynamics	4
	Project Phase 1	2
	Flight Simulation Lab	1
8	Aircraft Design	4
	Project work phase – II	8
	Technical Seminar	1
	Internship	2

Electives	
Professional Electives	Open Electives
Composite Materials and Structures	Introduction to Aerospace Engineering
Air Navigation	The History of Aviation
Aircraft Systems and Instruments	Airport Planning and Management
Gas Turbine Technology	Airline Industry
Rocket and Missile	Drone Technology
Theory of Elasticity	Air Traffic Control
Aircraft Maintenance, overhaul and repairs	Innovations in space technologies
Fuels and combustion	Urban air mobility
Heat Transfer	
Space Mechanics	
Experimental Aerodynamics	
Helicopter Engineering	
Satellite Technology	
Cryogenic Propulsion	
UAV Artificial Intelligence Systems	
Guidance and Control	
Civil Aviation Requirement	
NDT in Aerospace	
Flight Testing	
Total Quality Management	