

Aeronautical Engineering

Semester III

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Advanced Engineering Mathematics	3	2	0	5	70	30	30	20	150	1
	Electrical Machines & Electronics	3	1	0	4	70	30	30	20	150	1
	Fundamentals of Fluid Mechanics	3	0	2	5	70	30	30	20	150	1
	Mechanics of Solids	4	0	2	6	70	30	30	20	150	1
	Analysis Of Mechanisms & Machine Elements	3	2	0	5	70	30	30	20	150	1
	Aircraft Science and Manufacturing Processes	3	0	2	5	70	30	30	20	150	1
	Total	19	5	6	30						

Semester IV

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Mathematics-IV	3	2	0	5	70	30	30	20	150	1
	Basic Engineering Thermodynamics	4	1	0	5	70	30	30	20	150	1
	Aircraft Structures I	3	1	0	4	70	30	30	20	150	1
	Aircraft Systems, Instruments and Maintenance	4	2	0	6	70	30	30	20	150	1
	Computational fluid dynamics I	3	0	2	5	70	30	30	20	150	1
	Engineering Economics and Management	3	0	0	3	70	30	0	0	100	1
	Solid and Surface Modelling	0	0	2	2	0	0	100	50	100	1
	Total	20	6	4	30						

Semester V

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Institute Elective	3	0	2	5	70	30	30	20	150	1
	Flight Mechanics	4	1	0	5	70	30	30	20	150	1
	Fundamentals of Turbo Machines	4	1	0	5	70	30	30	20	150	1
	Aircraft Structures II	3	0	2	5	70	30	30	20	150	1
	Computational Fluid Dynamics II	3	0	2	5	70	30	30	20	150	1
	Aerodynamics I	4	1	0	5	70	30	30	20	150	1
	Total	21	3	6	30						

Semester VI

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Aerodynamics II	4	1	0	5	70	30	30	20	150	1
	Fundamentals of Jet Propulsion	4	1	0	5	70	30	30	20	150	1
	Vibration and Noise Control	4	0	2	6	70	30	30	20	150	1
	Basic Control Theory	3	0	2	5	70	30	30	20	150	1
	Avionics	3	0	2	5	70	30	30	20	150	1
	Department Elective I	4	0	0	4	70	30	0	0	100	1
	Total	22	2	6	30						

Semester VII

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Project ñ 1	0	0	4	4	0	0	100	50	150	1
	Aircraft Design I	4	0	2	6	70	30	30	20	150	1
	Theory of Heat Transfer	4	0	2	6	70	30	30	20	150	1
	Mechanics of Composite Materials	4	0	0	4	70	30	0	0	100	1
	Rocket & Missile Configurations Design	4	0	0	4	70	30	0	0	100	1
	Department Elective II	4	0	2	6	70	30	30	20	150	1
	Total	20	0	10	30						

Semester VIII

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Project ñ II	0	0	12	12	0	0	100	50	150	1
	Aircraft Design II	4	0	2	6	70	30	30	20	150	1
	Helicopter Engineering	4	0	0	4	70	30	0	0	100	1
	Space Dynamics	2	0	0	2	70	30	0	0	100	1
	Department Elective III	4	0	2	6	70	30	30	20	150	1
	Total	14	0	16	30						

Institute Elective

Composite Materials

Departmental Elective II:

Turbulence Modelling

Finite Element Method

Departmental Elective III:

Aircraft Control and Navigation

Viscous Flows and Boundary Layer Theory

Departmental Elective I:

Aeroelasticity

Air Traffic Control and Planning

Note: ALA Component, OEP Component and Design Module I, II and III (to be offered in 2nd Year , 3rd year and 4th year respectively) shall be displayed in the final teaching scheme