

Scheme of B. Tech. Aeronautical Engineering, 3rd Semester

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
3ANU1	Mechanics of Solids	50	100	150	3	1	0	4	3
3ANU2	Fluid Mechanics	50	100	150	3	1	0	4	3
3ANU3	Introduction to Aeronautics	50	100	150	3	0	0	3	3
3ANU4	Aircraft Materials Engineering	50	100	150	3	0	0	3	3
3ANU5	Manufacturing Processes	50	100	150	3	0	0	3	3
3ANU6	Advanced Engineering Mathematics– I	50	100	150	3	0	0	3	3
3ANU7	Introduction to Aeronautics Lab	50	25	75	0	0	3	3	2
3ANU8	Fluid Mechanics Lab	50	25	75	0	0	3	3	2
3ANU9	Mechanics of Solids Lab	35	15	50	0	0	2	2	1
3ANU10	Aircraft Materials Lab	35	15	50	0	0	2	2	1
3ANU11	Professional Skill Lab	35	15	50	0	0	2	2	1
3ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	18	2	12	32	26

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Scheme of B. Tech. Aeronautical Engineering, 4th Semester

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
4ANU1	Aerodynamics – I	50	100	150	3	1	0	4	3
4ANU2	Engineering Thermodynamics	50	100	150	3	1	0	4	3
4ANU3	Aircraft Structures – I	50	100	150	3	0	0	3	3
4ANU4	Theory of Machines	50	100	150	3	0	0	3	3
4ANU5	Machine Design	50	100	150	3	0	0	3	3
4ANU6	Advanced Engineering Mathematics – II	50	100	150	3	0	0	3	3
4ANU7	Aerodynamics Lab	50	25	75	0	0	3	3	2
4ANU8	Manufacturing Technology Lab	50	25	75	0	0	3	3	2
4ANU9	Aircraft Structures Lab	35	15	50	0	0	2	2	1
4ANU10	Object Oriented Programming Lab	35	15	50	0	0	2	2	1
4ANU11	Contemporary Challenges	35	15	50	0	0	2	2	1
4ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	18	2	12	32	26

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Scheme of B. Tech. Aeronautical Engineering, 5th Semester

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
5ANU1	Aerodynamics – II	50	100	150	3	1	0	4	3
5ANU2	Aircraft Performance	50	100	150	3	1	0	4	3
5ANU3	Heat Transfer	50	100	150	3	0	0	3	3
5ANU4	Elements of Vibration	50	100	150	3	0	0	3	3
5ANU5	Aircraft Systems	50	100	150	3	0	0	3	3
5ANU6	Elective – I	50	100	150	3	0	0	3	3
5ANU6.1	Rotorcraft Dynamics								
5ANU6.2	Smart Materials								
5ANU6.3	Introduction to Robotics								
5ANU6.4	Automobile Engineering								
5ANU7	CAD Lab	45	30	75	0	0	3	3	2
5ANU8	Heat Transfer Lab	45	30	75	0	0	3	3	2
5ANU9	Element of Vibration Lab	35	15	50	0	0	2	2	1
5ANU10	Aircraft System Lab	35	15	50	0	0	2	2	1
5ANU11	Professional Ethics & Disaster Management	35	15	50	0	0	2	2	1
5ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	18	2	12	32	26

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Scheme of B. Tech. Aeronautical Engineering, 6th Semester

Codes	Scheme	Internal	External	Max. Marks	Contact hours/week				Credits
					L	T	P	Total	
6ANU1	Aerospace Propulsion – I	50	100	150	3	1	0	4	3
6ANU2	Aircraft Structures – II	50	100	150	3	1	0	4	3
6ANU3	Aircraft Stability and Control	50	100	150	3	0	0	3	3
6ANU4	Space Dynamics	50	100	150	3	0	0	3	3
6ANU5	Mechanics of Composites	50	100	150	3	0	0	3	3
6ANU6	Elective – II	50	100	150	3	0	0	3	3
6ANU6.1	Unmanned Aerial Vehicles								
6ANU6.2	Experimental Fluid Mechanics								
6ANU6.3	Fatigue and Fracture								
6ANU6.4	Renewable Energy Systems								
6ANU7	Aircraft Propulsion Lab	50	25	75	0	0	3	3	2
6ANU8	Aeromodelling Design and Fabrication lab	50	25	75	0	0	3	3	2
6ANU9	Advanced Programming in MATLAB	35	15	50	0	0	2	2	1
6ANU10	Mechatronics Lab	35	15	50	0	0	2	2	1
6ANU11	Business Communication Lab	35	15	50	0	0	2	2	1
6ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	18	2	12	32	26

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Scheme of B. Tech. Aeronautical Engineering, 7th Semester

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
7ANU1	Aerospace Propulsion – II	50	100	150	3	1	0	4	3
7ANU2	Aircraft Design	50	100	150	3	1	0	4	3
7ANU3	Introduction to Computational Fluid Dynamics	50	100	150	3	0	0	3	3
7ANU4	Finite Element Methods	50	100	150	3	0	0	3	3
7ANU5	Automatic Control Systems	50	100	150	3	0	0	3	3
7ANU6	Elective – III	50	100	150	3	0	0	3	3
7ANU6.1	Non-Destructive Testing								
7ANU6.2	Experimental Stress Analysis								
7ANU6.3	Artificial Intelligence								
7ANU6.4	Fuel Cells and Hybrid Engine Technology								
7ANU7	CFD Lab	50	25	75	0	0	3	3	2
7ANU8	Aircraft Design lab	50	25	75	0	0	3	3	2
7ANU9	FEM Lab	35	15	50	0	0	2	2	1
7ANU10	Minor Project	0	50	50	0	0	2	2	1
7ANU11	Practical Training	50	0	50	0	0	2	2	1
7ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	18	2	12	32	26

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Scheme of B. Tech. Aeronautical Engineering, 8th Semester

OPTION – A

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
8ANU1	Avionics	50	100	150	3	0	0	3	3
8ANU2	Refrigeration and Air-Conditioning	50	100	150	3	0	0	3	3
8ANU3	Airport Management and Aircraft Maintenance	50	100	150	3	0	0	3	3
8ANU4	Elective – IV	50	100	150	3	0	0	3	3
8ANU4.1	Missile Technology								
8ANU4.2	Viscous Flow								
8ANU4.3	Fundamental of Combustion								
8ANU4.4	Operation Research								
8ANU5	Avionics Lab	50	25	75	0	0	3	3	2
8ANU6	Refrigeration and Air-Conditioning Lab	50	25	75	0	0	3	3	2
8ANU7	Flight Simulation Lab	50	25	75	0	0	3	3	2
8ANU8	Seminar	75	50	125	0	0	3	2	2
8ANU9	Major Project	150	100	250	0	0	10	10	5
8ANUDC	Discipline & Extra-Curricular Activities			50	0	0	0	0	1
	Sub-Total			1250	12	0	22	34	26

OPTION – B

Codes	Scheme	Internal	External	Max Marks	Contact hours/week				Credits
					L	T	P	Total	
8ANE1	Internship	400	750	1150	0	0	48	48	24
8ANE2	Seminar	25	75	100	0	0	3	3	2
	Sub-Total			1250			51	51	26

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