

**Curriculum for B.Tech Aerospace Engineering**

S. No.	Course Code	Course Title	Category	Type	Credit	Total Credits
1	ASE1001	INTRODUCTION TO AEROSPACE ENGINEERING	Program - Core	LT	3	100
2	MEE1006	BASIC WORKSHOP	Program - Core	P	2	
3	MEE1007	ENGINEERING GRAPHICS	Program - Core	P	2	
4	MEE1002	ENGINEERING MECHANICS	Program - Core	LT	3	
5	ASE1002	THERMODYNAMICS FOR AEROSPACE ENGINEERING	Program - Core	LT	2	
6	ASE1004	MECHANICS OF MATERIALS	Program - Core	LTP	3	
7	ASE1005	FLUID MECHANICS FOR AEROSPACE ENGINEERING	Program - Core	LTP	3	
8	ASE2010	GUIDANCE, NAVIGATION & CONTROL	Program - Core	LT	3	
9	ASE2001	MATERIAL TESTING AND METROLOGY	Program - Core	LTP	4	
10	ASE2004	AIRCRAFT MANUFACTURING TECHNOLOGY	Program - Core	LT	3	
11	ASE2002	AERODYNAMICS	Program - Core	LTP	4	
12	ASE3001	AEROSPACE INSTRUMENTATION AND MAINTENANCE	Program - Core	LT	2	
13	ASE2005	AEROSPACE STRUCTURES	Program - Core	LTP	3	
14	ASE1003	THERMAL AND HEAT TRANSFER FOR AEROSPACE ENGINEERING	Program - Core	LTP	3	
15	ASE2007	COMPUTER AIDED AIRCRAFT DRAWING	Program - Core	LP	3	
16	ASE3002	COMPUTATIONAL FLUID DYNAMICS FOR AEROSPACE ENGINEERING	Program - Core	LTP	3	
17	ASE2006	AEROSPACE PROPULSION	Program - Core	LTP	4	
18	ASE3003	AIRCRAFT PERFORMANCE - STABILITY AND CONTROL	Program - Core	LT	3	
19	ASE3004	SPACE FLIGHT MECHANICS	Program - Core	LT	3	
20	ASE5001	AEROSPACE VEHICLE DESIGN	Program - Core	LT	3	
21	DSN2098	PROJECT EXHIBITION - I	Program - Core	PJ	1	
22	DSN2099	PROJECT EXHIBITION - II	Program - Core	PJ	1	
23	DSN2096	ENGINEERING DESIGN	Program - Core	LT	2	
24	DSN3099	ENGINEERING PROJECTS IN COMMUNITY SERVICE	Program - Core	PJ	2	
25	EEE1001	ELECTRIC CIRCUITS AND SYSTEMS	Program - Core	LTP	4	
26	CSE1021	INTRODUCTION TO PROBLEM SOLVING AND PROGRAMMING	Program - Core	LTP	4	
27	DSN2097	INTERNSHIP	Program - Core	PJ	2	
28	DSN4098	COMPREHENSIVE EXAM	Program - Core	PJ	2	
29	DSN4099	CAPSTONE PROJECT	Program - Core	PJ	20	
30	ASE3005	INTRODUCTION TO CONTROL ENGINEERING	Program - Core	LT	3	
31	ASE3006	AVIONICS FOR FLIGHTS	Program - Elective	LT	3	
32	ASE2008	INDUSTRIAL AERODYNAMICS	Program - Elective	LT	3	
33	ASE3007	SMART MATERIALS FOR AEROSPACE	Program - Elective	LT	3	
34	ASE3008	HYPERSONIC AERODYNAMICS	Program - Elective	LT	3	
35	ASE3009	COMPOSITE MATERIALS AND MECHANICS	Program - Elective	LT	3	
36	ASE3010	ROCKETS AND MISSILE TECHNOLOGY	Program - Elective	LT	3	
37	ASE2003	MECHANISMS AND MACHINE THEORY	Program - Elective	LT	3	
38	ASE5002	SATELLITE DESIGN	Program - Elective	LT	3	
39	ASE4002	AIRCRAFT MAINTENANCE AND AIR TRAFFIC MANAGEMENT	Program - Elective	LT	3	
40	ASE4003	EXPERIMENTAL AERODYNAMICS	Program - Elective	LT	3	
41	ASE4004	SATELLITE COMMUNICATION AND SATELLITE TECHNOLOGY	Program - Elective	LT	3	
42	ASE4005	AEROELASTICITY	Program - Elective	LT	3	
43	ASE4006	INTRODUCTION TO ASTROPHYSICS AND SPACE ENVIRONMENT	Program - Elective	LT	3	
44	ASE4007	SPACE VEHICLE DESIGN AND SIMULATION	Program - Elective	LTP	3	
45	CHY1001	ENGINEERING CHEMISTRY	Natural Science - Core	LTP	4	
46	PHY1001	ENGINEERING PHYSICS	Natural Science - Core	LTP	4	
47	CHY1002	ENVIRONMENTAL SCIENCE	Natural Science - Core	LT	3	
48	MAT1001	CALCULUS AND LAPLACE TRANSFORM	Natural Science - Core	LT	4	
49	MAT3001	COMPLEX VARIABLE AND PARTIAL DIFFERENTIAL EQUATION	Natural Science - Core	LT	4	
	PHY1004	FUNDAMENTALS OF SPACE PHYSICS			4	
50	MAT2001	DIFFERENTIAL AND DIFFERENCE EQUATIONS	Natural Science - Core	LT	3	
51	MAT2003	APPLIED NUMERICAL METHODS	Natural Science - Core	LT	3	
52	MAT3003	PROBABILITY, STATISTICS AND RELIABILITY	Natural Science - Core	LT	4	

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53	PHY2001	MATERIALS SCIENCE	Natural Science - Elective	LT	3	3
54	PHY2002	ENERGY AND ENVIRONMENTAL PHYSICS	Natural Science - Elective	LT	3	
55		MATERIALS AND INSTRUMENTAL METHODS	Natural Science - Elective	LT	3	
56	ENG1001	COMMUNICATION FOR TECHNICAL PROFESSIONALS	Humanities and Management - Core	LP	3	13
57	HUM1001	ETHICS AND VALUES	Humanities and Management - Core	LT	2	
58	ENG2001	TECHNICAL WRITING AND COMPOSITION	Humanities and Management - Core	LP	2	
59	STS1001	SOFT SKILLS I	Humanities and Management - Core	LT	1	
60	STS2001	SOFT SKILLS II	Humanities and Management - Core	LT	1	
61	HUM1008	SWACHH BHARAT	Humanities and Management - Core	PJ	2	
62	EXC1001	EXTRA CURRICULAR ACTIVITIY	Humanities and Management - Core	PJ	2	
63	MGT1012	ENGINEERING ECONOMICS	Humanities and Management - Elective	LT	3	9
	HUM1004	IT AND SOCIETY	Humanities and Management - Elective	LT	3	
64	HUM1002	EMOTIONAL INTELLIGENCE	Humanities and Management - Elective	LT	3	
65	HUM1006	ANTHROPOLOGY FOR ENGINEERS	Humanities and Management - Elective	LT	3	
66	MGT1002	PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR	Humanities and Management - Elective	LT	3	
67	PLA1001	PLACEMENT TRAINING I	Humanities and Management - Elective	LT	4	
68		OPEN ELECTIVES	Open Courses - Electives from other Technical/ Emerging Courses		6	6
69	PLA1002	PLACEMENT TRAINING II	Open Elective		2	180
				Total		
UE	PLE1001	Programming for computing engineers				
	PLE1002	PROGRAMMING FOR ENGINEERS				
	PLE1003	Logic and Problem solving for engineers				