

DAYANANDA SAGAR UNIVERSITY
SHAVIGE MALLESHWARA HILLS, KUMARASWAMY LAYOUT BENGALURU-560
111, KARNATAKA.

SCHOOL OF ENGINEERING



SCHEME & SYLLABUS FOR
BACHELOR OF TECHNOLOGY (B.Tech.) – 2019 AEROSPACE ENGINEERING

(ASE)

2020-2024

SCHEME - B.TECH –ONWARDS

III SEM - AEROSPACE ENGINEERING

S L	PROGRA M CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE		SCHEME OF EVALUATION	
					L	T	P	S/P	C	SE M	COURSE CODE	CIA	SEE
1	101	20ME2301	COMPLEX VARIABLES & NUMERICAL METHODS	CR	04	--	--	--	04	*	***	60	40
2	101	20AS2301	INTRODUCTION TO AEROSPACE ENGINEERING	CR	03	--	--	--	03	*	***	60	40
3	101	20AS2302	THERMODYNAMICS	CR	03	--	--	--	03	*	***	60	40
4	101	20AS2303	FLUID MECHANICS	CR	03	--	--	--	03	*	***	60	40
5	101	20AS2304	MECHANICS OF SOLIDS	CR	03	--	--	--	03	*	***	60	40
6	101	20AS2305	AEROSPACE MATERIALS	CR	03	--	--	--	03	*	***	60	40
7	101	20AS2306	COMPOSITES LAB	CR	--	--	02	--	01	*	***	60	40
8	101	20AS2307	FLUID MECHANICS LAB	CR	--	--	02	--	01	*	***	60	40
9	101	20AS2308	MINI PROJECT – I	CR	--	--	--	02	01	*	***	60	40
					19	--	04	02	22			360	320

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,

SCHEME - B.TECH

IV SEM - AEROSPACE ENGINEERING

S L	PROGRA M CODE	COUR SE COD E	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE		SCHEME OF EVALUATION	
					L	T	P	S/ P	C	SE M	COURSE CODE		
1	101	20AS240 1	AIRCRAFT PROPULSION	CR	03	--	--	--	03	*	***	60	40
2	101	20AS240 2	AERODYNAMICS – I	CR	03	--	--	--	03	*	***	60	40
3	101	20AS240 3	AEROSPACE STRUCTURAL MECHANICS	CR	03	--	--	--	03	*	***	60	40
4	101	20AS240 4	MECHANISMS AND MACHINE THEORY	CR	03	--	--	--	03	*	***	60	40
5	101	20AS240 5	MANUFACTURING PROCESSES	CR	03	--	--	--	03	*	***	60	40
6	101	20AS240 6	PRODUCT DESIGN - 1	CR	02	--	02	--	03	*	***	60	40
7	101	20AS240 7	AEROSPACE STRUCTURES LAB	CR	--	--	02	--	01	*	***	60	40
8	101	20AS240 8	MANUFACTURING PROCESSES LAB	CR	--	--	02	--	01	*	***	60	40
9	101	20AS240 9	MINI PROJECT – II	CR	--	--	--	02	01	*	***	60	40
					17	--	06	02	21			360	320

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,

VSEM - AEROSPACE ENGINEERING

SL	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					Pre Requisite	SCHEME OF EVALUATION	
				L	T	P	S/P	C		60	40
1	20AS3501	Aerodynamics-II	CR	03	00	--	--	03	Aerodynamics-1	60	40
2	20AS3502	Introduction to Space Technology	CR	03	--	--	--	03	Introduction to Aerospace Engineering	60	40
3	20AS3503	Aircraft Performance	CR	03	00	--	--	03		60	40
4	20AS3504	Avionics	CR	03	--	--	--	03		60	40
5	20AS3508/ 20AS3509	Program Elective – 1	CR	03	--	--	--	03		60	40
6	20OEX XX	Open Elective – 1	CR	03	--	--	--	03		60	40
7	20AS3505	Avionics Lab	CR	--	--	02	--	1		60	40
8	20AS3506	Flight Physics Lab	CR	--	--	02	--	1		60	40
9	20AS3507	Mini Project – III	CR	--	--	--	02	1		60	40
TOTAL				18	03	04	02	21		360	320

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits, CIA – Continuous Internal Assessment

**PROGRAM ELECTIVE –
1**

Sl. No	Course Code	Course Name
1.	20AS3508	Wind tunnel model testing
2.	20AS3509	Finite elemental methods

VI SEMESTER

SL	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					Pre Requisite	SCHEME OF EVALUATION	
				L	T	P	S/P	C			
1.	20AS3601	CONTROL THEORY	CR	03	--	--	--	03		60	40
2.	20AS3602	AIRCRAFT DESIGN	CR	03	--	--	--	03		60	40
3.	20AS3603	AIRCRAFT STABILITY AND CONTROL	CR	03	--	--	--	03	Aircraft Performance	60	40
4.	20AS3604	ORBITAL MECHANICS	CR	03	--	--	--	03	Introduction to Space Technology	60	40
5.	20AS3603	PROGRAM ELECTIVE – 2	CR	03	--	--	--	03		60	40
6.	20OEXXX X	OPEN ELECTIVE – 2	CR	03	--	--	--	03		60	40
7.	20AS3605	SIMULATION LAB	CR	--	--	03	--	1		60	40
8.	20AS3606	MODEL BASED SYSTEM ENGINEERING	CR	01	--	03	--	2		60	40
9.	20AS3607	MINI PROJECT – IV	CR	--	--	--	04	1		60	40
TOTAL				19		06	04	22		360	320

