

Rashtreeya Sikshana Samithi Trust
R.V COLLEGE OF ENGINEERING, BENGALURU-560059
(Autonomous Institution affiliated to VTU, Belagavi)



B.E-AEROSPACE ENGINEERING

2015 Scheme

R. V. College of Engineering, Bengaluru – 59.

(An Autonomous Institution affiliated to VTU, Belagavi)

Department of Aerospace Engineering

THIRD SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	12MA31	Applied Mathematics-III	Maths	3	0	1	0	4
2	12EB32	Environmental science and Biology for Engineers	ME	3	0	0	1	4
3	15AS33	Basics of Aerospace Engg	AS	4	0	0	0	4
4	15AS34	Thermodynamics (Theory & Practice)	AS	3	1	0	1	5
5	15AS35	Fluid Mechanics (Theory & Practice)	AS	3	1	0	1	5
6	15AS36	Structural Mechanics	AS	4	0	0	1	5
7	12DMA37	Bridge course Mathematics-I**	Maths					
		Credits		20	2	1	4	27
		No. of. Hrs		20	4	2	16	42

**** Mandatory Audit course for Lateral entry (Diploma students)**

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FOURTH SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	12MA41	Applied Mathematics-IV	Maths	3	0	1	0	4
2	12EM42	Engineering Materials	ME	3	0	0	0	3
3	15AS43	Aerodynamics (Theory & Practice)	AS	3	1	0	1	5
4	15AS44	Aerospace Structures (Theory & Practice)	AS	3	1	0	1	5
5	15AS45	Design of Machine Elements	AS	4	0	0	1	5
6	15AS46	Manufacturing Technology (Theory & Practice)	AS	3	1	0	1	5
7	12HSS47	Innovation and Social Skills	HSS	0	1	0	0	1
8	12DMA47	Bridge course Mathematics-II**	Maths					
		Credits		19	4	1	4	28
		No. of. Hrs		19	08	02	16	45

**** Mandatory Audit course for Lateral entry (Diploma students)**

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FIFTH SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	12HSI51	Intellectual Property Rights & Entrepreneurship	HSS	3	0	0	0	3
2	15AS52	Kinematics & Dynamics of Machines	AS	3	0	0	0	3
3	15AS53	Flight Mechanics (Theory & Practice)	AS	3	1	0	1	5
4	15AS54	Aerospace Instrumentation & Controls (Theory & Practice)	AS	3	1	0	1	5
5	15AS55	Finite Element Method (Theory & Practice)	AS	3	1	0	0	4
6	15AS5AX	Elective-A	AS	3	0	0	0	3
	15AS5BX	Elective-B	AS	3	0	0	0	3
		Credits		21	03	00	02	26
		No. of. Hrs		21	06	00	08	39

ELECTIVE A		ELECTIVE B	
Course Code	Course Title	Course Code	Course Title
15AS5A1	Experimental Aerodynamics	15AS5B1	Fatigue & Fracture
15AS5A2	Combustion & Heat Transfer	15AS5B2	Reliability & Quality Control
15AS5A3	Numerical Methods	15AS5B3	Advanced Material Technology

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SIXTH SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	12HSM61	Management & Organizational Behaviour	HSS	3	0	0	0	3
2	15AS62	Aerospace Propulsion (Theory & Practice)	AS	3	1	0	1	5
3	15AS63	Gas Dynamics (Theory & Practice)	AS	3	1	0	1	5
4	15AS64	Aerospace, Stability & Control	AS	4	0	0	0	4
5	15AS65	Emerging Technologies	AS	2	0	0	0	2
6	15AS6CX	Elective-C	AS	3	0	0	1	4
7	15AS6DX	Elective-D	AS	3	0	0	1	4
		Credits		22	01	00	04	27
		No. of. Hrs		22	02	00	16	40

ELECTIVE C		ELECTIVE D	
Course Code	Course Title	Course Code	Course Title
15AS6C1	Computational Fluid Dynamics	15AS6D1	Experimental Stress Analysis
15AS6C2	Hydraulics & Pneumatics	15AS6D2	Rockets & Missiles
15AS6C3	Space Technology	15AS6D3	Helicopter Dynamics
EMERGING TECHNOLOGIES - Mechanics of Composite Materials			

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SEVENTH SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	15AS71	Space Dynamics	AS	3	0	0	0	3
2	15AS72	Aerospace Guidance, Control & Navigation (Theory & Practice)	AS	3	1	0	0	4
3	12HSC73	Legal Studies and Professional Ethics for Engineers	HSS	2	0	0	0	2
4	15AS74	Mini Project	AS	0	2	0	0	2
5	15AS75	Vibration Engineering (Theory & Practice)	AS	3	1	0	0	4
6	15AS7EX	Elective-E	AS	4	0	0	0	4
7	12GF7XX	Global Elective F		4	0	0	0	4
8	12GG7XX	Global Elective G		3	0	0	0	3
		Credits		22	04	00	00	26
		No. of. Hrs		19	08	00	00	27

Elective-E (12AS7EX)		Global Elective-F(15GF7XX)	Global Elective-G (15GG7XX)
Course Code	Course Title	To be opted from electives offered by other Departments	To be opted from electives offered by other Departments
15AS7E1	Hypersonic Aerodynamics		
15AS7E2	Satellite Technology		
15AS7E3	Non-Destructive Testing		

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EIGHTH SEMESTER CREDIT SCHEME

Sl.No	Course code	Course	BoS	Credit Allocation				Total Credits
				L	P	T	S	
1	15AS81	Major Project	AS	0	18	0	0	18
2	15AS82	Technical Seminar	AS	0	1	0	0	1
3	12HSS83	Innovation & Skills	HSS	0	1	0	0	1
			Credits	00	20	00	00	20
			Hours	00	40	00	00	40

LIST OF GLOBAL ELECTIVES

SI No.	BoS	Group F			Group G		
		Course Code	Course Title	Credits	Course Code	Course Title	Credits
1	AS	15GF7XX	Basics of Aerospace Engineering	4	15GG7XX	Aerospace guidance, control, and Navigation	3
2	BT	12GF701	Nanomaterials: Process and Applications	4	12GG701	Bioinformatics	3
3	CH	12GF702	Green Technology	4	12GG702	Industrial safety & risk management	3
4	CS	12GF703	Mobile Application Development	4	12GG703	Intelligent Systems	3
5	CV	12GF704	Disaster Management	4	12GG704	Solid Waste Management	3
6	EC	12GF705	Artificial Neural Networks	4	12GG705	Automotive Electronics	3
7	EE	12GF706	Design of Renewable Energy Systems	4	12GG706	Industrial electronics	3
8	IM	12GF707	Optimization Techniques	4	12GG707	Systems Engineering	3
9	IM	12GF708	Project Management	4			
10	IT	12GF710	Virtual instrumentation	4	12GG709	MEMS	3
11	ME	12GF711	Automotive Engineering	4	12GG710	Mechatronics	3
12	TE	12GF712	Telecommunication Systems	4	12GG711	Space Technology and Applications	3
14	Science	12GF713	Thin films and surface engineering	4			
		12GF714	Engineering materials for advanced technology	4			
15	HSS	12GF715	Applied Psychology for Engineers	4			
