

R.V College of Engineering, Bengaluru-560059*(Autonomous Institution affiliated to VTU, Belagavi)***Department of Mechanical Engineering****2012 SCHEME OF TEACHING & EXAMINATION For UG course**

THIRD SEMESTER								
Sl. No	Course Code	Course	BoS	Credit Allocation				Total Credits
				Lecture	Practical	Tutorial	Self Study	
1	12MA31	Applied Mathematics-III	Science	3	0	1	0	4
2	12EM32	Engineering Materials	ME	3	0	0	0	3
3	12ME33/ IM33/CV33	Mechanics of Materials	Civil	3	1	0	1	5
4	12ME34	Basic Thermodynamics	ME	3	0	1	1	5
5	12ME35	Fluid Mechanics	ME	3	0	1	1	5
6	12ME36	Production Technology-1	ME	3	1	0	1	5
7	12DMA37	Bridge Course Mathematics – I	Science	2	0	0	0	0
								27
		No. of hours		20	04	03	16	43

FOURTH SEMESTER								
Sl. No	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1	12MA41	Applied Mathematics IV		3	0	1	0	4
2	12EB42	Environmental science and Biology for Engineers		3	0	0	1	4
3	12ME43/ IM43	Measurements and Metrology	ME	3	1	1	0	5
4	12ME44	Kinematics of Machines	ME	3	0	0	1	4
5	12ME45	Applied Thermodynamics	ME	3	1	0	1	5
6	12ME46	Production Technology-II	ME	3	1	1	0	5
7	12HSS47	Innovation and Social Skills	ME	0	1	0	0	1
8	12DMA47	Bridge Course Mathematics – II	Science	2	0	0	0	0
								28
		No. of hours		20	08	03	12	43

Fifth Semester

Sl. No	Course Code	Course	BOS	Theory (L)	Tutorial (T)	Practical (P)	Self Study (S)	Total Credits
1	12 HSI 51	Intellectual Property Rights & Entrepreneurship	HSS	3	0	0	0	3
2	12ME52 / IM52	Design of Machine Elements – I	ME	3	0	1	1	5
3	12 ME53	Heat Transfer	ME	3	0	1	1	5
4	12 ME54	CAD / CAM	ME	3	0	1	1	5
5	12 ME5AX	Elective-A	ME	3	0	0	1	4
6	12 ME5BX	Elective –B	ME	3	0	0	1	4
			Credits	18	0	3	5	26
			Hours	18	0	6	20	44

ELECTIVE A	
Course Code	Course Title
12 ME 5A1	Materials Technology
12 ME 5A2	Refrigeration Air-conditioning
12 ME 5A3	Quality & Reliability Engineering
ELECTIVE B	
Course Code	Course Title
12 ME 5B1	Stress Analysis
12 ME 5B2	Energy Conversion Engineering
12 ME 5B3	Operations Research & Management

Sixth Semester

Sl. No	Course Code	Course	BOS	Theory (L)	Tutorial (T)	Practical (P)	Self Study (S)	Total Credits
1	12 HSM61	Management & Organizational Behaviour	HSS	3	0	0	0	3
2	12ME62	Design of Machine Element- II	ME	3	0	1	1	5
3	12 ME 63	Dynamics of Machines	ME	3	0	0	1	4
4	12 ME 64	Turbomachinery	ME	3	0	1	1	5
5	12 MEE 65	Emerging Technologies	ME	2	0	0	0	2
6	12 ME 6CX	Elective-C	ME	4	0	0	0	4
7	12 ME 6DX	Elective –D	ME	3	0	0	0	3
			Credits	21	0	2	3	26
			Hours	21	0	4	12	37

ELECTIVE C	
Course Code	Course Title
12 ME 6C1	Polymers & Composite Materials
12 ME 6C2	Gas Dynamics & Combustion
12 ME 6C3	Mechatronics
ELECTIVE D	
Course Code	Course Title
12 ME 6D1	Fatigue Fracture & Failure Analysis
12 ME 6D2	Solar Energy Systems
12 ME 6D3	Flexible Manufacturing Systems

Seventh Semester

Sl. No	Course Code	Course	BOS	Lecture (L)	Tutorial (T)	Practical (P)	Self Study (S)	Total Credits
1	12ME71	Finite Element Methods	ME	3	0	2	0	5
2	12ME72	Control Engineering	ME	4	1	0	0	5
3	12HSC73	Legal Studies & Professional Ethics for Engineers	HSC	2	0	0	0	2
4	12ME74	Minor Project	ME	0	0	2	0	2
5	12ME7EX	Elective-E	ME	4	0	0	0	4
6	12GF7XX	Global Elective-F		4	0	0	0	4
7	12GG7XX	Global Elective-G		3	0	0	0	3
			Credits	20	0	4	1	25
			Hours	20	0	8	2	30

Professional Elective 12ME7EX	
Course Code	Course Title
12ME7E1	Advanced Vibration
12ME7E2	Computation Fluid Dynamics
12ME7E3	Advanced Manufacturing Engineering
12ME7E4	Introduction to Aerospace Propulsion

Eight Semester

Global Electives for 7th semester – 2012 Scheme							
Sl. No	BoS	Group F			Group G		
		Course Code	Course Title	Cred its	Course Code	Course Title	Cred its
1	BT	12GF701	Nonmaterial: Process and Applications	4	12GG701	Bioinformatics	3
2	CH	12GF702	Green Technology	4	12GG702	Industrial safety & risk management	3
3	CS	12GF703	Mobile Application Development	4	12GG703	Intelligent Systems	3
4	CV	12GF704	Disaster Management	4	12GG704	Solid Waste Management	3
5	EC	12GF705	Artificial Neural Networks	4	12GG705	Automotive Electronics	3
6	EE	12GF706	Design of Renewable Energy Systems	4	12GG706	Industrial electronics	3
7	IM	12GF707	Optimization Techniques	4	12GG707	Systems Engineering	3
8	IM	12GF708	Project Management	4			
9	IS	12GF709	Java & J2EE	4	12GG708	Cloud Computing	3
10	IT	12GF710	Virtual instrumentation	4	12GG709	MEMS	3
11	TE	12GF712	Telecommunication Systems	4	12GG711	Space Technology and Applications	3
12	BS				12GG712	Linear Algebra	3
13	BS	12GF713	Thin Films and Surface Engineering	4			
14	BS	12GF714	Engineering Materials for Advanced Technology	4			
15	HSS	12GF715	Applied Psychology for Engineers	4			

Sl. No	Course Code	Course	BOS	Theory (L)	Tutorial (T)	Practical (P)	Self Study (S)	Total Credits
1	12ME81	Major Project	ME	0	0	18	0	18
2	12ME82	Technical Seminar	ME	0	0	1	0	1
3	12HSS83	Innovations & Social Skills	HSS	0	0	1	0	1
			Credits	0	0	20	0	20
			Hours	0	0	40	0	40