

M. Tech. in Design Engineering - I Semester				
S. No.	Subject Code	Name of Subject	L-T-P	Credits
	Theory Subjects			
1	MEE 501	Optimization Techniques	3-1-0	4
2	MEE 503	Finite Element Methods and Analysis	3-0-0	3
3	MEM 509	Simulation, Modeling and Analysis	3-1-0	4
4		(Elective I)	3-0-0	3
5		(Elective II)	3-0-0	3
	Practical Labs			
6	MED 519	Finite Element Methods and Analysis Lab	0-0-3	2
7	MED 521	Seminar	0-0-3	2
8	GP 501	General Proficiency		1
		Total	15-2-6	22
		Total Contact Hours		

M. Tech. in Design Engineering - II Semester				
S. No.	Subject Code	Name of Subject	L-T-P	Credits
	Theory Subjects			
1	MEM 502	Industrial Tribology	3-1-0	4
2	MED 502	Experimental Stress Analysis	3-0-0	3
3	MEE 504	Design of Experiments	3-1-0	4
4		(Elective III)	3-0-0	3
5		(Elective IV)	3-0-0	3
	Practical Labs			
6	MED 526	Project	0-0-8	4
7	MED 528	Advanced Design Lab	0-0-3	2
8	GP 502	General Proficiency		1
		Total	15-2-7	24
		Total Contact Hours		

M. Tech. in Design Engineering - III Semester				
S. No.	Subject Code	Name of Subject	L-T-P	Credits
	Theory Subjects			
1	MED 601	Analysis and Synthesis of Mechanisms	3-0-0	3
2	MED 603	Reliability in Engineering Design	3-0-0	3
3		(Elective V)	3-0-0	3
	Practical Labs			
4	MED 613	Dissertation (Preliminary)	2*-0-24	12
5	GP 601	General Proficiency		1
		Total	11-0-24	22
		Total Contact Hours		

*Direct contact load of faculty concern will be 1 hour per student per week subjected to maximum of 2 hours per week.

M. Tech. in Design Engineering - IV Semester				
S. No.	Subject Code	Name of Subject	L-T-P	Credits
	Theory Subjects			
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	Practical Labs			
1	MED 614	Dissertation	0-0-42	21
2	GP 602	General Proficiency		1
		Total		22
		Total Contact Hours		

List of Electives for M. Tech. Design Engineering

Elective -I				
S. No.	Subject Code	Name of Subject	L-T-P	Credits
1	MED 501	Advanced Mechanical Design	3-0-0	3
2	MED 503	Advanced Mechanics of Solids	3-0-0	3
3	MED 505	Design of Pressure Vessels and Piping	3-0-0	3
4	MED 507	Bearings and Rotor-dynamics	3-0-0	3
Elective -II				
1	MED 509	Mechanical Behavior of Materials	3-0-0	3
2	MED 511	Design of Hydraulic and Pneumatic Systems	3-0-0	3
3	MED 513	Design of Automotive Components	3-0-0	3
4	MED 515	Design of Material Handling Equipments	3-0-0	3
Elective -III				
1	MED 504	Vibration Engineering	3-0-0	3
2	MED 506	Mechatronics System Design	3-0-0	3
3	MEM 516	Machine Tool Design	3-0-0	3
4	MET 516	Environmental Engineering and Pollution Control	3-0-0	3
Elective -IV				
1	MED 510	Engineering Fracture Mechanics	3-0-0	3
2	MED 512	Theory of Elasticity	3-0-0	3
3	MED 514	Theory of Plates and Shells	3-0-0	3
4	MED 522	Composite Materials and Analysis	3-0-0	3
Elective -V				
1	MEM 605	Rapid Prototyping and Manufacturing	3-0-0	3
2	MED 605	Vehicle Dynamics	3-0-0	3
3	MED 607	Robotic Engineering	3-0-0	3
4	MED 609	Design of Process Equipments	3-0-0	3