M. Tech. in Manufacturing 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	MEM 507	Industrial Automation and Robotics	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	MEM 519	Advanced Manufacturing Lab I	0-0-3	2
7	MEM 521	Seminar	0-0-3	2
8	GP 501	General Proficiency		1
		Total	**15-2-6**	**22**
		Total Contact Hours		

M. Tech. in Manufacturing 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	MEM 504	Metal Cutting and Tool Design	3-1-0	4
3	MEM 506	Micromachining and Nanofinishing	3-0-0	3
4		**(Elective III)**	3-0-0	3
5		**(Elective IV)**	3-0-0	3
		Practical Labs		
6	MEM 526	Project	0-0-8	4
7	MEM 528	Advanced Manufacturing Lab II	0-0-3	2
8	GP 502	General Proficiency		1
		Total	**15-2-11**	**24**
		Total Contact Hours		

		M. Tech. in Manufacturing Engineering - III Semester			
S. No.	**Subject Code**	**Name of Subject**	**L-T-P**	**Credits**	
		Theory Subjects			
1	MEM 601	Quality Engineering in Manufacturing	3-0-0	3	
2	MEM 603	Press Tool Design	3-0-0	3	
3		**(Elective V)**	3-0-0	3	
		Practical Labs			
4	MEM 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 Manufacturing Engineering - IV Semester			
S. No.	**Subject Code**	**Name of Subject**	**L-T-P**	**Credits**	
		Theory Subjects			
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		Practical Labs			
1	MEM 614	Dissertation	0-0-42	21	
2	GP 602	General Proficiency		1	
		Total		**22**	
		Total Contact Hours			

List of Electives for M. Tech. Manufacturing Engineering

S. No.	Subject Code	Name of Subject	L-T-P	Credits
Elective -I				
1	MEM 511	Welding Engineering	3-0-0	3
2	MEM 513	Thermo-fabrication Processes	3-0-0	3
3	MEM 515	Precision Engineering	3-0-0	3
4	MEM 517	Surface Engineering	3-0-0	3
Elective –II				
1	MEM 523	Modeling of Metal Forming Processes	3-0-0	3
2	MEM 525	Plastic Technology	3-0-0	3
3	MEM 527	Computer Aided Inspection	3-0-0	3
4	MEM 529	Design of Manufacturing Systems	3-0-0	3
Elective –III				
1	MEM 510	Design and Metallurgy of Welded Joints	3-0-0	3
2	MEM 512	Flexible and Computer Integrated Manufacturing	3-0-0	3
3	MEM 516	Machine Tool Design	3-0-0	3
4	MED 506	Mechatronics System Design	3-0-0	3
Elective –IV				
1	MEM 518	Mechanics of Sheet Metal Forming	3-0-0	3
2	MEM 522	Machining of Hard Materials	3-0-0	3
3	MEM 524	Design for Manufacturing and Assembly	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	MEM 607	Product Design and Development	3-0-0	3
3	MEM 609	Product Lifecycle Management	3-0-0	3
4	MEM 611	Manufacturing Systems Management	3-0-0	3