

COURSE STRUCTURE FOR M.TECH. MECHANICAL (DESIGN) FIRST YEAR

SEMESTER I			M.TECH										
Sr. No	Course Code	Course Name	Teaching Scheme					Exam Scheme					Total Marks
			L	T	P	C	Hrs/wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1	18ME 501T	Advanced Mechanics of Solids	3	0	0	3	3	25	50	25	--	--	100
2	18ME 502T	Finite Element and Mesh Free Methods	3	0	0	3	3	25	50	25	--	--	100
3	18ME 503T	Materials Design and Selection	3	0	0	3	3	25	50	25	--	--	100
4	ME XXXP	Design Lab-I	0	0	2	1	2	--	--	--	50	50	100
5	ME XXXT	Elective I	3	0	0	3	3	25	50	25	--	--	100
6	ME XXXT	Elective II	3	0	0	3	3	25	50	25	--	--	100
		Total	15	0	2	16	17						600

MS = Mid Semester, ES = End Semester;

IA = Internal assessment (like quiz, assignments etc)

LW = Laboratory work; LE = Laboratory Exam

Elective I: (i) ME XXXT: Mechanical Design Optimization, (ii) ME XXXT: Stress and Vibration Analysis in Turbo-Machinery, (iii) ME XXXT: Automotive Design, (iv) ME XXXT: Machine Learning Applications in Design and Manufacturing

Elective II: (i) ME XXXT: Design of Light Weight Structures, (ii) ME XXXT: Robotics, (iii) ME XXXT: Experimental Stress Analysis, (iv) ME XXXT: Design of Material Handling Equipment, (v) ME 426T: Rapid Product Development

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SEMESTER II			M.TECH										
Sr. No	Course Code	Course Name	Teaching Scheme					Exam Scheme					Total Marks
			L	T	P	C	Hrs/wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1	ME 504T	Experimental Methods	3	0	0	3	3	30	60	10	--	--	100
2	ME XXXT	Theory and Analysis of Vibration	3	0	0	3	3	30	60	10	--	--	100
3	ME XXXT	Product Design and Development	3	0	0	3	3	30	60	10	--	--	100
4	ME XXXP	Design Lab-II	0	0	2	1	2	--	--	--	50	50	100
5	ME XXXT	Elective III	3	0	0	3	3	30	60	10	--	--	100
6	ME XXXT	Elective IV	3	0	0	3	3	30	60	10	--	--	100
7	ME XXXT		3	0	0	3	2						
		Total	15	0	2	16	17						600

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Elective III: (i) ME XXXT: Fracture Mechanics, (ii) ME XXXT: Theory of Plates and Shells, (iii) ME XXXT: Vehicle Dynamics, (iv) ME XXXT: Design of Transmissions Systems

Elective IV: (i) ME XXXT: Theory of Elasticity and Plasticity, (ii) ME XXXT: Design for Energy, (iii) ME XXXT: Fault Diagnosis and Condition Monitoring, (iv) ME XXXT: Bicycle Design and Frame-Building

COURSE STRUCTURE FOR M.TECH. Mechanical Engineering (Design)

SEMESTER III

SEMESTER III			M.TECH.										
Sr. No	Course Code	Course Name	Teaching Scheme					Exam Scheme					
			L	T	P	C	Hrs/wk	Theory			Practical		Total
								MS	ES	IA	LW	LE/Viva	Marks
	ME 611	Seminar				4		40	60	--			100
	ME612	Project				14		40	60	--			100
	ME614	Industrial Internship											PP/NP
		Total				18							200

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COURSE STRUCTURE FOR M.TECH. Mechanical Engineering (Design)

SEMESTER IV

SEMESTER IV			M.TECH.										
Sr. No	Course Code	Course Name	Teaching Scheme					Exam Scheme					
			L	T	P	C	Hrs/wk	Theory			Practical		Total Marks
								MS	ES	IA	LW	LE/Viva	
	ME 621	Seminar				4		40	60	--			100
	ME622	Project and Dissertation				24		40	60	--			100
		Total				28							200

MS = Mid Semester, ES = End Semester;

IA = Internal assessment (like quiz, assignments etc.)

LW = Laboratory work; LE = Lab. Exam