Subject	COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
4ME1A: Kinematics of	To apply the concept of mechanism in different type of	Н	Н	Н	M	Н	M	Н	L	М	Н	Н	Н
Machines	machine elements.	11	11	11	1V1	11	1V1	11	L	1V1	11	11	11
	Interpret motion and modify different mechanism.	Н	Н	Н	Н	Н	L	Н	L	Н	Н	Н	Н
	Apply the concepts of power transmission through belt,	M	Н	Н	Н	Н	L	M	L	M	Н	Н	Н
	rope and chain etc.	101	11	11	11		L	1V1	L		11	11	11
	be able to design cam for a given input/out put motion.	Н	Н	Н	M	Н	L	Н	L	Н		Н	Н
4ME2A: Fluid Mechanics & Machines	To apply fundamental concepts of Fluid Mechanics.	Н	Н		M	Н	M	Н	M			Н	Н
	To apply Fluid flow concepts, Basic control volume and	Н	Н		L	Н	Н	Н	M			Н	Н
	differential equations.	п	п		L	п	п	п	IVI			п	п
	To understand and apply Viscous, Turbulent flow concepts,												
	flow measurement and Flow through pipe in practical fluid	Н	Н		M	M	Н	Н	M			L	Н
	mechanics applications.												
	To understand and operate Hydraulic Turbines and	Н	M		L	L	M	Н	M			L	M
	Hydraulic systems.	11	171		L	L	101	11	101			L	1V1
4ME3A: Machining &	Provide the basic concepts in mechanics of metal cutting,	M	L	M	L	M	M	L		M	M	L	M
Machine Tools	chip formation, various tool materials and tool life.	171	L	171	L	171	101	L	_	171	171	L	171
	Impart the concept of types of lathe, various operations that												
	can be performed in	M	L	M	L	M	L	L	_	M	M	M	M
	various lathes, various mechanisms adopted.												
	Instruct the working principle, operations performed, work,												
	tool holding devices and different attachments in milling	M	M	M	L	Н	M	M	_	L	L	L	M
	and drilling machines.												
	Acquaint with the fundamentals of finishing process, super												
	finishing process and their	M	M	M	L	Н	L	L	_	M	L	M	M
	associated machine tools.												
	Student will be able to select the proper Engineering												
4ME4A: Design of	materials as per design requirement and understand the	Н	M	Н	Н	M	M	M	M	M	Н	Н	M
Machine Elements - I	importance of standardization of machine components and	11	171	11	11	141	141	141	171	141	11	11	141
	providing allowances while designing a component												
	Student will be able to analyze different loading conditions												
	and design machine components under static and dynamic	Н	Н	Н	M	M	M	M	L	M	M	M	M
	loads.												

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	Student will be able to apply the concepts of stress												
	analysis, theory of failure and material science to	Н	Н	Н	M	M	M	M	L	M	M	M	М
	analyze,design and select commonly used machine	11	11	11	171	171	171	101		171	171	171	H H H M M
	components												
	Student will be able to illustrate the variety of Mechanical												
	components available and emphasize the need to continue	Н	M	M	M	Н	M	M	M	M	M	M	Н
	learing	<u> </u>											
4ME5A: Industrial	To illustrate the importance of Industrial Engineer in any	,,					,,	,,	.,,			**	
Engineering	industry and implement the different concepts involved in	H	Н	Н	Н	H	Н	Н	Н	Н	Н	H	H
	work study and method study.												
	To implement work measurement techniques in any industry and justify the importance of management and	H	Н	Н	Н	Н	M	M	M	Н	M	ц	п
	decision making in present global scenario.	П	п	П	п	П	IVI	IVI	IVI	П	IVI	п	п
	, , , , , , , , , , , , , , , , , , ,												
	To identify different business forms and organization with												
	their relevance in today's competitive environment and	Н	Н	Н	Н	M	M	M		M	M	Н	Н
	demonstrate break even analysis for decision making.												
	To implement the concepts of various cost accounting and												
	financial management practices widely applied in	Н	Н	Н	Н	M	M	M			L	Н	Н
	industries.												
4ME6A: I.C. Engines	To recognize the reasons of difference among operating	Н	M	Н	M		Н	Н	Н	М		П	П
+MEOA. I.C. Engines	characteristic of different engine types and design.	11	IVI	11	1V1		11	11	11	1V1		11	11
	To understand the combustion of spark ignition &	H	M	Н	M	Н	M	Н	M		L	H H H H H H H H H H H H H H H H H H H H	
	Compression ignition Engine.		171		171		171		171			171	171
	To identify the basic parts of an IC Engine and ignition	Н	M	Н	M	M	M	L		M	L	M	М
	systems.	ļ									_		
	To analyze the engine friction and lubrication parameters	Н	Н	L		M	M	Н	Н	Н	M	M	Н
	and supercharging.												
	To apply the principles of dual, multi fuel and special	Н	Н	Н	Н	Н		M		Н	Н	Н	M
4ME7A: Kinematics of	engines. To classify different types of links and mechanisms used	1											
4ME/A: Kinematics of Machine Lab	for different purposes in different machines.	Н	Н	Н	Н	Н	L	M	L	L	L	Н	L
iviaciiiile Lau	To apply the concepts of power transmission by the												
	application of friction.	Н	M	Н	M	M	L	L	L	L	L	L	M
	jappheauon of metion.	<u> </u>	<u> </u>	<u> </u>				<u> </u>	<u> </u>				

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4ME8A: Fluid Mechanics	To apply Basic fluid mechanics principle in practical	Н	Н	M	M	L		M		M		Ţ	Н
Lab	application.	11	11	171	171	L		171		171		L	11
	To study flow characteristics, measure flow rates and	Н	Н	M	M	L		M		M		Ţ	Н
	related parameters.	11	11	101	171	L		171		171		L	11
4ME9A: Production	To know about various machining processes and effect of	Н	Н	Н	Н	Н	M	M	Н	Н	L	Н	M
Practice-II	machining parameters on quality of workpiece.	11	11	11	11	11	171	171	11	11	L	11	IVI
	To communicate efficiently with industry personnel by H H	M	Н	Н	M	M	Н	Ţ	Н	Н	M		
	developing a manufacturing-centric knowledge.	11	11	1V1	11	11	IVI	IVI	11	L	11	11	IVI
4ME10A: Machine Design	To classify differeent Engineering materials and understand	Н	M	M	Н	M	M	M	L	M	M	M	M
Sessional - I	BIS nomenclature	11	1V1	1V1	11	IVI	1V1	IVI	L	IVI	IVI	1V1	IVI
	To design various machine components such as cotter and												
	knuckle joint,shafts,shaft	Н	Н	Н	Н	Н	M	M	L	Н	M	M	M
	coupling,levers,beams,brackets,screw jack etc under	11	11	11	11	11	1V1	1V1	L	11	IVI	1V1	1V1
	various loading and stress conditons.												
	To explore the working of major systems used in												
4ME11A: Thermal	conventional and modern engines and identify sources of	Н	Н	M	Н	Н		Н	Н	M	Н	Н	
Engineering Lab-I	harmful engine emissions to develop pollution abatement	П	п	IVI	п	п		п	П	1V1	п	п	
	techniques.												
	To explore concepts of thermal engineering systems and	•											
	analyze thermal systems and their components for optimal	Н	Н		M	Н	M	M		M	M	M	Н
	performance.												