Branch: **MECHANICAL ENGINEERING**

Semester Pattern (Choice Based Credit Grade System)

SEMESTER: FIFTH																	
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME									
			HOURS / WEEK			Total HRS/WEEK	CREDITS	THEORY					PRACTICAL				
			Lecture	Tutorial	P/D			Duration of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks			Min. Passing Marks
													Int.	Ext.		
THEORY																	
01	5ME01	Heat Transfer	3	--	--	3	3	3	80	20	100	40	--	--	--	--
02	5ME02	Metrology & Quality Control	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	5ME03	Kinematics of Machines	3	1	--	4	4	3	80	20	100	40	--	--	--	--
04	5ME04	Measurement Systems	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	5ME05	Open Elective – I (OE-I)	3	--	--	3	3	3	80	20	100	40	--	--	--	--
PRACTICALS / DRAWING / DESIGN																	
06	5ME06	Heat Transfer- lab.	--	--	2	2	1	-	-	-	-	-	25	25	50	25
07	5ME07	Metrology & Quality Control- lab.	--	--	2	2	1	-	-	-	-	-	25	25	50	25
08	5ME08	Kinematics of Machines- lab.	--	--	2	2	1	-	-	-	-	-	25	25	50	25
09	5ME09	Measurement Systems –lab.	-	--	2	2	1	-	-	-	-	-	25	25	50	25
Total			**15**	**1**	**8**	**24**	**20**	**-**	**-**	**-**	**500**	**-**	**-**	**-**	**200**	**-**
Grand Total																**700**

Open Elective – I (For other Disciplines): (i) Industrial Robotics and Applications (ii) Modern Manufacturing Techniques

Open Elective-I to be opted from the University's faculty of Engineering & Technology offered inter-disciplinary courses or MOOCs courses pertaining to the Engineering Profession.

An Orientation Program of 15 Hours duration / MOOCs on Advanced Courses line Machine learning, 3-D Printing, Virtual Reality, Supply Chain Management, Numerical Computation for Mechanical Engineers, Biomechanics, Fundamentals of nano-Engineering, Micro-Electromechanical Systems, Nano-to-Macro Transport Processes, Fundamentals of Photo Voltaic, Machine Tools etc. be offered during V semester.

SEMESTER: SIXTH																	
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME									
			HOURS / WEEK			Total HRS/WEEK	CREDITS	THEORY					PRACTICAL				
			Lecture	Tutorial	P/D			Duration of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks Int.	Max. Marks Ext.		Min. Passing Marks	
THEORY																	
01	6ME01	Design of Machine Elements	3	--	--	3	3	3	80	20	100	40	--	--	--	--	
02	6ME02	Dynamics of Machines	3	1	--	4	4	3	80	20	100	40	--	--	--	--	
03	6ME03	Control System Engineering	3	--	--	3	3	3	80	20	100	40	--	--	--	--	
04	6ME04	Prof. Elective - I	3	--	--	3	3	3	80	20	100	40	--	--	--	--	
05	6ME05	Open Elective - II	3	--	--	3	3	3	80	20	100	40	--	--	--	--	
PRACTICALS / DRAWING / DESIGN																	
06	6ME06	Design of Machine Elements- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25	
07	6ME07	Dynamics of Machines- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25	
08	6ME08	Computer Aided Design & Simulation - lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25	
09	6ME09	Research Skills - lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25	
Total			**15**	**1**	**8**	**24**	**20**	**--**	**--**	**--**	**500**	**--**	**--**	**--**	**200**	**--**	
Grand Total																**700**	

6ME04: Prof. Elect. (I): (i) Non- Conventional Energy Sources (ii) Project Management (iii) Lean Manufacturing

6ME05: Open Elect. (II) [For other Disciplines]: (i) Renewable Energy Technologies (ii) Automobile Engineering and Electric Vehicles

Open Elective-II to be opted from the University's faculty of Engineering & Technology offered inter-disciplinary courses or MOOCs courses pertaining to the Engineering Profession.

An Orientation Program of 15 Hours duration / MOOCs on Entrepreneurship Development to be offered during VI Semester.