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Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon																
Department of Mechanical Engineering																
Course Outcomes(COs)																
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Name:	Mechatronics	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C01	Define sensor, transducer and understand the applications of different sensors and transducers	1	1	1	3	2				2	1		1			1
CO2	Explain the signal conditioning and data representation techniques	3	2			3	3	2				1	3			1
CO3	Design pneumatic and hydraulic circuits for a given application	1	1		3	3	2	1		3		1	3	2		
CO4	Write a PLC program using Ladder logic for a given application	3	3	1	1	3		1	1	1					2	
CO5	Understand applications of microprocessor and micro controller	3			1	3	2	3					2			
CO6	Analyse PI, PD and PID controllers for a given application		3	3		3	3	1	1	3			2		2	
Course Name:	Industrial Engineering and Management	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	Impart fundamental knowledge and skill sets required in the Industrial Management and Engineering profession, which include the ability to apply basic knowledge of mathematics, probability and statistics, and the domain knowledge of Industrial Management and Engineering											2	1	2		1
CO2	Produce ability to adopt a system approach to design, develop, implement and innovate integrated systems that include people, materials, information, equipment and energy.									2	2	2		2	1	
CO3	Understand the interactions between engineering, businesses, technological and environmental spheres in the modern society.								2							2
CO4	Understand their role as engineers and their impact to society at the national and global context.								2				2			2

Course Name:	Non-conventional Machining	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	Classify Non-conventional machining processes.	1	1	1	1	1	1				1		1			1
CO2	Understand working principle and mechanism of material removal in various non-conventional machining processes.	2	2	1		2	1	1			1		1	1		
CO3	Identify process parameters their effect and applications of different processes.	2	2	1	1	2	1	1			1		1		2	
CO4	Summarized merits and demerits of non-conventional machining processes.	2	2	1		2	1	1			1		1			
CO5	Explain the mechanism to design hybrid processes such as ELID grinding, EDCG, EDCM, etc.	3	2	1	1	2	2	1			1		1	2		
CO6	Understand mechanism and working principle of micro machining using non-conventional processes.	2	2	1	1	1	2	1			1		1		1	
Course Name:	Entrepreneurship Development	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	enlarge the supply of entrepreneurs for rapid industrial development									2						1
CO2	Develop small and medium enterprises sector which is necessary for generation of employment									2					1	
CO3	Industrialize rural and backward regions											2				
CO4	Provide gainful self-employment to educated young men and women											2	3			
CO5	Diversify the sources of entrepreneurship.												3			2
Course Name:	Plant Maintenance	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	Recognize and enlist probable failures in mechanical elements.		2	2		1	2	1	1	2			2			1
CO2	Dismantle, assemble and align mechanisms in sequential order for given assembly.	2			1	1	2	2					2	2		
CO3	Compare maintenance practices like on-line, shut down, corrosion, productive and preventive maintenance.	2	2	1	1	1		1	1	1					1	
CO4	Analyze economics of plants and list factors affecting the maintenance of a plant.	1	1		2	1	2	1		2		1	2		2	
CO5	Correlate the linkages between different maintenance aspects and how they impact on overall maintenance effectiveness.	2				1	2	2				1	2			
CO6	Analyze different maintenance techniques and select an appropriate technique for a particular plant.	1	2				1	2				1	1		2	

Course Name:	Intellectual Property Rights	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	State the basic fundamental terms such as copyrights, Patents, Trademarks etc.	1												1		
CO2	Interpret Laws of copy-rights, Patents, Trademarks and various IP registration Processes.								1							1
CO3	Exhibit the enhance capability to do economic analysis of IP rights, technology and innovation related policy issues and firms commercial strategies.		1						1						1	
CO4	Create awareness at all levels (research and innovation) to develop patentable technologies.										1					
CO5	Apply trade mark law, copy right law, patent law and also carry out intellectual property audits.	1							1							2
CO6	Manage and safeguard the intellectual property and protect it against unauthorized use								2							
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Course Name:	Project Stage – I/Internship	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	State the aim and objectives for this stage of the project		2				2	1		3		3	2			3
CO2	Construct and conduct the tests on the system/product		2	3	3	1				3		3	3	3	3	
CO3	Analyze the results of the tests.		2	2	3	1				3		3	3	3	3	
CO4	Discuss the findings, draw conclusions, and modify the system/product, if necessary.		2			1				3	3	3	3	3	3	