

DEPARTMENT OF MECHANICAL ENGINEERING

Regulation-2017 Course Outcomes

S.No	Year/ Sem	Course Code	Course Name	Course Outcome
1	IV/VII	ME8792	Power Plant Engineering	 CO1: Explain the layout, construction and working of the components inside a thermal power plant. CO2: Explain the layout, construction and working of the components inside a Diesel, Gas and Combined cycle power plants CO3: Explain the layout, construction and working of the components inside nuclear power plants. CO4: Explain the layout, construction and working of the components inside Renewable energy power plants. CO5: Explain the applications of power plants while extend their knowledge to power plant economics and environmental hazards and estimate the costs of electrical energy production.
2	IV/VII	ME8793	Process Planning and Cost Estimation	 CO1: To understand Process planning activities, interpret the overall output, evaluate and select the material, equipments and tool with various process planning methods. CO2: To prepare documents of process planning using quality assurance methods and process parameter calculation. CO3: To understand the importance of costing and estimation procedure with different cost and losses. CO4: To gain knowledge about the preparation of estimation of a product in forging shop, welding shop, foundry shop. CO5: To calculate machining time in lathe, milling, grinding, shaping & operations.
3	IV/VII	ME8791	Mechatronics	 CO1: Discuss the interdisciplinary applications of Electronics, Electrical, Mechanical and Computer Systems for the Control of Mechanical, Electronic Systems and sensor technology. CO2: Discuss the architecture of Microprocessor and Microcontroller, Pin Diagram, Addressing Modes of Microprocessor and Microcontroller. CO3: Discuss Programmable Peripheral Interface, Architecture of 8255 PPI, and various device interfacing. CO4: Explain the architecture, programming and application of programmable logic controllers to problems and challenges in the areas of Mechatronic engineering. CO5: Discuss various Actuators and Mechatronics system using the knowledge and skills acquired through the course and also from the given case studies.

4	IV/VII	OML751	TESTING OF MATERIALS	CO1: Identify suitable testing technique to inspect industrial component CO2: Ability to use the different technique and know its applications and limitations
5	IV/VII	GE8077	Total Quality Management	 CO1: To apply the basic knowledge in total quality management relevant to both manufacturing and service industry including IT sector CO2: To implement the basic principles of TQM in manufacturing and service based organization CO3: To apply the tools of quality management to manufacturing and services processes. CO4: To apply the techniques of quality management to manufacturing and services processes. CO5: To apply the knowledge on various ISO standards and quality systems.
6	IV/VII	GE8074	Human Rights	CO1: Engineering students will acquire the basic knowledge of human rights.
7	IV/VII	ME8711	Simulation and Analysis Laboratory	CO1: Simulate the working principle of air conditioning system, hydraulic and pneumatic cylinder and cam follower mechanisms using MATLAB. CO2: Analyze the stresses and strains induced in plates, brackets and beams and heat transfer problems. CO3: Calculate the natural frequency and mode shape analysis of 2D components and beams.
8	IV/VII	ME8781	Mechatronics Laboratory	CO1: Demonstrate the functioning of mechatronics system with various pneumatic, hydraulic and electrical systems. CO2:Demonstrate the functioning of control systems with the help of PLC and microcontrollers
9	IV/VII	ME8712	Technical Seminar	CO1: To enrich the communication skills of the student.CO2: Presentations of technical topics of interest.
10	IV/VIII	MG8591	Principles of Management	CO1: Understanding of managerial functions – planning. CO2: Understanding of managerial functions – organizing. CO3: Understanding of managerial functions – staffing. CO4: Understanding of managerial functions leading & controlling. CO5: Basic knowledge on international aspect of management.
11	IV/VIII	MG8091	Entrepreneurship Development	 CO1: Have the ability to discern distinct entrepreneurial traits. CO2: To aid entrepreneurial motivation and manage frustration. CO3: To Know the parameters to assess opportunities and constraints for new business ideas. CO4: To develop knowledge regarding legal and regulatory environment. CO5: To make use of government machinery and support system.
12	IV/VIII	Core	ME8811 & Project Work	CO1: On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology.