

SKN SINHGAD COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by DTE (MS) & Affiliated to Punyashlok Ahilyadevi Holkar, Solapur University, Solapur)

Accredited 'A' Grade by NAAC

At Post- Korti, Taluka-Pandharpur, District-Solapur, Pin-413304

Department of Mechanical Engineering

NAME OF	APPLIED THERMODYNAMICS		
COURSE:			
COURSE	ME-211	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	S.Y. B.Tech MECH	NAME OF SUBJECT	NLP
		TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES	
CO-1	Apply mathematics and laws of thermodynamics to solve real-life problems.	
CO-2	Evaluate steam properties and analyze the performance of steam generators using steam table.	
CO-3	Apply knowledge of basic thermodynamic concepts for analysis of vapour power cycles.	
CO-4	Understand thermodynamics of steam nozzles and analysis of steam turbine.	
CO-5	Study of steam condensers for various applications.	
CO-6	Calculate various performance parameters of reciprocating air compressors.	



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Department of Mechanical Engineering

NAME OF	MECHANICS OF MATERIALS		
COURSE:			
COURSE	ME-212	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	S.Y. B.Tech MECH	NAME OF SUBJECT	SSK/ASK
		TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES	
CO-1	Demonstrate fundamental knowledge about different types of loading and stresses induced for given applications.	
CO-2	Compute the stresses induced in basic mechanical components subjected to various axial, torsional flexural load and strain energy under gradual, sudden and impact loading.	
CO-3	Interpret SFD and BMD for different types of loads and support conditions.	
CO-4	Develop shear force and bending moment diagrams to analyze the bending & shear stresses offered by the beam.	
CO-5	Compute the principal stresses & position planes in a member subjected to various types of stress system.	



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Department of Mechanical Engineering

NAME OF	MANUFACTURING PROCESSES		
COURSE:			
COURSE	ME-213	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	S.Y. B.Tech MECH	NAME OF SUBJECT	ASK/SCM
		TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Demonstrate the different types of pattern and explain gating system used in casting process.
CO-2	Identify appropriate melting and molding techniques with classification of different defects in casting.
CO-3	Explain in brief about various joining processes engineering application.
CO-4	Illustrate and compare the types of forming processes such as rolling, forging, extrusion, drawing etc.
CO-5	Make use of various advanced application.
CO-6	Illustrate different rapid prototyping techniques.



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Department of Mechanical Engineering

NAME OF COURSE:	MACHINE DRAWING & CAD		
COURSE CODE:	ME-214	ACADEMIC YEAR:	2022-23
CLASS:	S.Y. B.Tech MECH	NAME OF SUBJECT TEACHER:	HSD/ADJ

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Apply BIS Convention in drawing mechanical components and assembly drawings.
CO-2	Use geometrical, dimensions, tolerances and symbols in part and assembly drawing.
CO-3	Draw assembly, details drawing and identify applications of same.
CO-4	Prepare 2D drawing and 3Dof machine components using drafting software.



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Department of Mechanical Engineering

NAME OF COURSE:	INTERNAL COMBUSION ENGINES		
COURSE CODE:	ME-2152	ACADEMIC YEAR:	2022-23
CLASS:	S.Y. B.Tech MECH	NAME OF SUBJECT TEACHER:	RKS

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Recognize and understand the reasons for differences in the construction of different types of internal combustion engines.
CO-2	Evaluate differences among operating characteristics of different engine types and designs.
CO-3	Select the appropriate engine for a given application.
CO-4	Conduct performance tests on engines and Compare experimental results with Theoretical predictions.
CO-5	Compare experimental results with theoretical predictions and make proper justifications.



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Department of Mechanical Engineering

NAME OF COURSE:	Engineering Mathematics III		
COURSE CODE:	ME-221	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Solve higher order linear differential equations and its applications to
	Free & Forced damped and un-damped systems.
CO-2	Solve partial differential equations of first order and partial differential
	equation such as wave equation.
CO-3	Apply Fourier series techniques to express a function in terms of sine and
	cosine components so as to model simple periodic functions.
CO-4	Apply numerical methods for solving linear and for evaluating definite
	integrals.
CO-5	Apply integral transform techniques such as Laplace transform to find
	Laplace transform
	of given functions.
CO-6	Apply Statistical methods like correlation, regression in analyzing and
	interpreting
	experimental data applicable to reliability engineering and probability
	theory in testing
	and quality control.



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Department of Mechanical Engineering

NAME OF COURSE:	Fluid Mechanics and Fluid Machines		
COURSE CODE:	ME-223	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Solve issues related to fluid statics, kinematics& dynamics.
CO-2	Apply Bernoulli's theorem and continuity equation in real world situations
CO-3	Measure and calculate Head loss of fluid
CO-4	Perform dimensional analysis for research problems in fluid mechanics
CO-5	Explain construction and working of different types of turbines, centrifugal pump
CO-6	Analyze the performance of water turbines and centrifugal pumps for a given conditions.



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Department of Mechanical Engineering

NAME OF COURSE:	Kinematics and Theory of Machines		
COURSE CODE:	ME-224	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Select mechanism for different applications
CO-2	Perform velocity and acceleration analysis of mechanisms
CO-3	Develop cam profile for given set of motion inputs.
CO-4	Select gears and design gear trains for given application
CO-5	Explain types of governors and their characteristics
CO-6	Do balancing of rotary and reciprocating masses.



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Department of Mechanical Engineering

NAME OF COURSE:	Mechatronic Systems		
COURSE CODE:	ME2251	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES	
CO-1	Explain types and applications of sensors and actuators in mechatronic	
	systems.	
CO-2	Explain computer networks and their applications.	
CO-3	Program microcontrollers in assembly/and or C/C++/Python/Java to	
	demonstrate interfacing with sensors and actuators	
CO-4	Program PLCs using ladder logic (both on simulators and actual	
	hardware).	
CO-5	Explain what is interfacing and how to do it.	
CO-6	Build and program a mechatronic system which will accept data from	
	input and sensors and control an output/actuator using any	
	microprocessor/ microcontroller board (Arduino or Raspberry Pi can	
	also be used)	



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Department of Mechanical Engineering

NAME OF COURSE:	Power Plant and Energy Engineering		
COURSE CODE:	ME2252	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES	
CO-1	Describe forms of energy source and their impact on environment.	
CO-2	Calculate performance parameters related to power plant.	
CO-3	Explain the economics of power plant & categorize power plant as base	
	load & peak load plant.	
CO-4	Compare various renewable energy sources with their features.	
CO-5	Recognize energy conservation opportunities and explain energy audit	
	concept.	



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Department of Mechanical Engineering

NAME OF COURSE:	Solid Mechanics		
COURSE CODE:	ME2253	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	To analyse the principal stresses and thermal stresses
CO-2	To Investigate the distribution of the two dimensional stresses using Airy
	stress function.
CO-3	To analyse the stresses in rotating disks and pressurized cylinders.
CO-4	To locate the shear centre in design of thin open cross sections
	subjected to the transverse loading.
CO-5	To analyse the crippling load in the design of columns.
CO-6	To use the energy methods based on application.



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Department of Mechanical Engineering

NAME OF COURSE:	MECHANICAL WORKSHOP-I		
COURSE CODE:	ME 226 ACADEMIC YEAR : 2022-23		
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	To operate different machine tools such as grinders, lathes, drilling
	machines etc.
CO-2	To machine the component as per specified dimensions.
CO-3	To develop the skills necessary for engineering practices like joining
	and forming processes.
CO-4	To Choose and apply the appropriate methods for pattern making &
	sheet metal working I.
	Preparation of Wooden pattern (single piece) for a simple component:



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Department of Mechanical Engineering

NAME OF COURSE:	Electrical Technology		
COURSE: COURSE CODE:	ME227	ACADEMIC YEAR:	2022-23
CLASS:	Second Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Identify and select suitable DC motor /AC motor/induction motor and
	its speed control method for given industrial application.
CO-2	Calculate performance parameters of DC motor/ single phase induction
	motor/three phase induction motor through load test.
CO-3	Explain interfacing and write basic program using microprocessors
	8085 trainer/ microcontrollers 8051/simulator.
CO-4	Interface sensor with Arduino Uno microcontroller board.
CO-5	Interface and control Electrical motors with Arduino Uno board



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Department of Mechanical Engineering

Outward No.: SKNSCOE/MECH / Date:

NAME OF	CAD-CAM-CAE		
COURSE:			
COURSE	ME-312	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	T.Y. B.Tech MECH	NAME OF	USG
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Solve CAD related problems from industries.
CO-2	Elaborate the concept of geometric modelling
CO-3	Create solid model in CAD/CAM/CAE environment according to predefined parameters
CO-4	Analyze Geometric transformations and FEA applications to mechanical component.
CO-5	Solve CAM related problems of manufacturing industries.
CO-6	Develop CNC part programming to operate CNC milling & turning machine to manufacture a Mechanical part.



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NAME OF	Advanced Programming Concepts – I (Python)		
COURSE:			
COURSE	ME-316	ACADEMIC YEAR	2022-23
CODE:		•	
CLASS:	T.Y. B.Tech MECH	NAME OF	JKH/AAM
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Describe basic concepts in Python programming
CO-2	Write python script using procedure-oriented approach
CO-3	Use Python standard library modules in writing Python scripts for problem solving
CO-4	Write Python scripts in object-oriented approach.
CO-5	Apply file handling options available in Python in programming
CO-6	Exhibit ability to use python to provide solution to a given problem.



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NAME OF	Design of Machine Elements		
COURSE:			
COURSE	ME-311	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	T.Y. B.Tech MECH	NAME OF	PPK
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Design the machine elements subjected to axial loads
CO-2	Design mechanical component subjected to fluctuating loads
CO-3	Implement standardization in design of machine elements
CO-4	Design the machine elements subjected to twisting and bending moments.
CO-5	Develop practical and theoretical approaches to different mechanical component designs.
CO-6	Analyse and design mechanical components on the basis of different design aspects



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NAME OF	Industrial Engineering		
COURSE:			
COURSE	ME-313	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	T.Y. B.Tech MECH	NAME OF	ASA
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Analyze & measure productivity.
CO-2	Perform method study
CO-3	Apply knowledge of ergonomics and industrial safety
CO-4	Perform work measurement'
CO-5	Select facility location and design plant layout
CO-6	Apply knowledge of job evaluation and merit rating



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NAME OF COURSE:	Industrial Hydraulics & Pneumatics		
COURSE CODE:	ME-315	ACADEMIC YEAR :	2022-23
CLASS:	T.Y. B.Tech MECH	NAME OF SUBJECT TEACHER:	DRG

NO.	COURSE OUTCOMES
CO-1	Choose hydraulic & pneumatic systems for proper applications
CO-2	Explain construction & working of hydraulic & pneumatic system components/ devices
CO-3	Select appropriate actuators for a particular application
CO-4	Draw symbols of hydraulic & pneumatic system components/ devices
CO-5	Prepare hydraulic & pneumatic circuits for various applications
CO-6	Identify process flow on a hydraulics or pneumatic schematic



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NAME OF	METALLURGY		
COURSE:			
COURSE	ME-314	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	T.Y. B.Tech MECH	NAME OF	HSK
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES	
CO-1	Select ferrous alloys for engineering applications.	
CO-2	Demonstrate the significance of heat treatment processes for engineering applications	
CO-3	Apply powder metallurgy for manufacturing of products.	
CO-4	Establish the characteristics of non-ferrous alloys	
CO-5	Select suitable non-destructive testing method for products.	
CO-6	Establish the characteristics of composite materials.	



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NAME OF	Metrology		
COURSE:			
COURSE	ME-318	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	T.Y. B.Tech MECH	NAME OF	SRK
		SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Calibrate the instruments like vernier calliper and micrometer.
CO-2	Perform angle measurement using a sine bar
CO-3	Measure various gear tooth elements using gear tooth vernier caliper.
CO-4	Use dial indicator to check Lathe machine parameters like parallelism, squareness, alignment etc.
CO-5	Measure effective diameter of a screw thread
CO-6	Select adequate limits and fits for various applications.



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Department of Mechanical Engineering

NAME OF	Transmission System Des	Transmission System Design	
COURSE:			
COURSE	ME-321	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Design the spur gear considering criterion of bending and wear for particular application.
CO-2	Design the helical gear considering criterion of bending and wear as per required
CO-2	application.
CO-3	Design the Bevel gear considering criterion of bending and wear at particular location.
CO-4	Design the worm gear considering criterion of strength, wear and thermal as per requirement.
CO-5	Select the bearing from manufacturer's catalogue and to use for suitable application.
CO-6	Calculate of dimensions of clutches and brakes required for an application



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Department of Mechanical Engineering

NAME OF	Instrumentation and Control Engineering		
COURSE:			
COURSE	ME-322	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Analyse the generalised measurement system, identify various static & dynamic characteristics of instruments, make use of various measuring instruments for measurement Of temperature, pressure and vacuum.
CO-2	Use various measuring instruments for measurement of displacement, speed and flow.
CO-3	Use various measuring instruments for measurement of Force, torque and strain.
CO-4	Identify manual & automatic control systems, open and closed loop systems, various modes of control, to apply block diagram algebra to determine transfer function of a given control system
CO-5	Construct Root Locus for a given control system and comment on system stability.
CO-6	Construct Bode Plots for a given control system and comment on system stability.



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Department of Mechanical Engineering

NAME OF	Heat Transfer		
COURSE:			
COURSE	ME-323	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Compare and distinguish the Modes of heat transfer.
CO-2	Apply the laws of conduction heat transfer to the analysis
CO-3	Apply the different laws to the radiation heat transfer.
CO-4	Analyze heat transfer in case of natural & forced convection
CO-5	Explain heat transfer in boiling & condensation.
CO-6	Analyze the effectiveness, rating of heat exchangers.



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Department of Mechanical Engineering

NAME OF COURSE:	Industrial & Quality Management		
COURSE CODE:	ME-324	ACADEMIC YEAR:	2022-23
CLASS:	Third Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Understand basics of Industrial Management and their functions.
CO-2	Discuss and demonstrate management functions to various organisations.
CO-3	Explain and apply various quality control/statistical tools for industrial / organizational problems.
CO-4	Understand working of various departments in industry
CO-5	Understand various tools and techniques of total quality management used in industry



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Department of Mechanical Engineering

NAME OF	Plastic Engineering (Prof	Plastic Engineering (Professional Elective – IV)	
COURSE:			
COURSE	ME-325 C	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES	
CO-1	Predict the structure and properties of different kind of plastic material and select	
	the plastic materials for particular end user application.	
CO-2	Know the processing of different plastic material based on the end user requirement	
CO-3	Design the plastic products	
CO-4	Design compression and transfer molds	
CO-5	Design Injection Moulds	
CO-6	Design plastic injection mould for cooling	



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Department of Mechanical Engineering

NAME OF	Advanced Programming Concepts – II (Java)		
COURSE:			
COURSE	ME-327	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Install JAVA IDE & develop simple applications using JAVA.
CO-2	Read from and write to text files and debug errors.
CO-3	Write Java code using advanced Java feature
CO-4	Write JAVA applet for windows based applications such as Word & Excel and JAVA scripts for CAD software such as CATIA & AutoCAD.
CO-5	Develop a small JRE based application or Applet for a mechanical engineering subject.
CO-6	Use the syntax and semantics of java programming language and basic concepts of OOP



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Department of Mechanical Engineering

NAME OF	Mechanical Workshop –	Ш	
COURSE:			
COURSE	ME-327	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Understand the working of various machines
CO-2	Operate various machine tools.
CO-3	Perform various machining operations.
CO-4	Selection of operational and process parameters during machining operations.
CO-5	Manufacture a small assembly of components.
CO-6	Understand various attachments on various machines.



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Department of Mechanical Engineering

NAME OF	Mini Project		
COURSE:			
COURSE	ME-328	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Third Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Identify and analyze the potential technical problems.
CO-2	Carry out research about the selected topic
CO-3	Seek suggestions from subject experts
CO-4	Carry out planning and its execution with teammates
CO-5	Develop solution for a set of requirements for the problem identified.
CO-6	Write a report with all the contents in logical order and do Quality Presentation



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Department of Mechanical Engineering

Outward No.: SKNSCOE/MECH / Date:

NAME OF	Automobile Engineering		
COURSE:			
COURSE	ME-412	ACADEMIC YEAR	2022-23
CODE:		•	
CLASS:	Final Year B.Tech	NAME OF	PPK
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Demonstrate various systems in an automobile
CO-2	Describe importance and features of different elements like axle, differential, brakes, steering, suspension, wheel balancing, electrical systems etc
CO-3	Explain principle of operation, construction and applications of various sensors used in modern automobiles



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NAME OF	Refrigeration and Air Conditioning		
COURSE:	ME-411	ACADEMIC YEAR	2022.22
CODE:	WIE-411	ACADEMIC TEAR :	2022-23
CLASS:	Final Year B.Tech MECH	NAME OF SUBJECT TEACHER:	DRG

NO.	COURSE OUTCOMES
CO-1	Evaluate performance of various types of refrigeration systems.
CO-2	Select appropriate refrigerant considering necessary properties
CO-3	Use Psychrometric chart and tables and analyze psychrometric process for obtaining required air conditions
CO-4	Describe comfort chart and compare duct design methods.



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NAME OF	Robotics and Artificial Intelligence		
COURSE:			
COURSE	ME-413	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	USG
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	. Explain construction and applications of different types of robots
CO-2	. Explain types of sensors and actuators and end effectors used in the construction of robots.
CO-3	Solve simple forward and inverse kinematics problems for jointed arm robots
CO-4	Define Artificial Intelligence and explain concepts such as searching, reasoning and other associated terminology
CO-5	Explain fuzzy logic, ANN, GAs, and their applications



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NAME OF	Production and Operations Management		
COURSE:			
COURSE	ME-4141	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Explain importance, scope and need of production and operation management
CO-2	Evaluate the future demands using different forecasting methods
CO-3	Apply the concept of capacity planning and aggregate planning to various types of manufacturing systems
CO-4	Explain the importance of production planning and control, and inventory management in production process and its elements
CO-5	Apply the concept of plant maintenance
CO-6	To get acquainted with various advanced techniques such as Lean manufacturing ,value engineering, six sigma, Kanban, Supply chain management



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NAME OF	Computational Fluid Dynamics		
COURSE:			
COURSE	ME-4142	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Express numerical modeling and its role in the field of fluid flow and heat transfer.
CO-2	Apply the various discretization methods, solution procedures and turbulence modeling to solve flow and heat transfer problems
CO-3	Interpret the knowledge, capability of analyzing and solving any concept or problem associated with heat energy dynamics and utilization.
CO-4	Illustrate the working concepts of thermal engineering.
CO-5	Understand the issues that arise in the numerical solution of fluid flow equations



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NAME OF	Finite Element Metho	d	
COURSE:			
COURSE	ME-4144	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Implement general procedure of FEA for structural and thermal problems.
CO-2	Write down shape functions for 1D, 2D and 3D elements.
CO-3	Solve 1D, 2D and 3D problems using FEA procedure
CO-4	Solve boundary value problems using variational calculus and weighted residuals methods.
CO-5	Analyze of 1D, 2D and 3D problems for static and dynamic loads in commercial or open source FEA software.



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Department of Mechanical Engineering

NAME OF	Project Work Stage-I Seminar		
COURSE:			
COURSE	ME-416	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Identify the complex problem which is related to industry or society.
CO-2	Apply basic engineering knowledge for solving the identified problem
CO-3	Carry out state of the art related to the problem identified.
CO-4	Plan the work for solving the problem identified.



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NAME OF	Industrial Training		
COURSE:			
COURSE	ME-417	ACADEMIC YEAR	2022-23
CODE:		:	
CLASS:	Final Year B.Tech	NAME OF	
	MECH	SUBJECT	
		TEACHER:	

NO.	COURSE OUTCOMES
CO-1	Write technical report and give presentation.
CO-2	Correlate theoretical knowledge with the practical things in Industry
CO-3	Understand Responsibility and role of Engineer in Industry
CO-4	Understand the Industrial culture & Organizational setup



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NAME OF	Project Work Stage-II Seminar		
COURSE:			
COURSE	ME-421	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Final Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Communicate with various stakeholders and perform the work in team
CO-2	Find out various dimensions of the various parts of the model.
CO-3	Analyze various types of stresses and failures which will exist in the model using suitable software.
CO-4	Select suitable manufacturing process to fabricate the model.
CO-5	Apply suitable design of experiment technique.
CO-6	Apply suitable statistical technique for analysis of results



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NAME OF	Project Work Stage-III Seminar		
COURSE:			
COURSE	ME-422	ACADEMIC YEAR:	2022-23
CODE:			
CLASS:	Final Year B.TECH.	NAME OF SUBJECT	
	MECH	TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Students should complete online audit course on statistical tools used in research with case study.
CO-2	Carry out analysis of results by employing suitable statistical technique.
CO-3	Interpretation/Analysis of the results
CO-4	Report writing and preparing presentation
CO-5	Students should write a technical paper and present it in the conference/journal.
CO-6	Students should be able to commercialize their project in the society.



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NAME OF COURSE:	Project Work (Report Submission & Presentation)		
COURSE CODE:	ME-423	ACADEMIC YEAR:	2022-23
CLASS:	Final Year B.TECH. MECH	NAME OF SUBJECT TEACHER:	

COURSE OUTCOMES:

NO.	COURSE OUTCOMES
CO-1	Students should submit the project report in the prescribed format.
CO-2	Students should prepare the power point presentation and present it in front of examiners.