



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

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Department of Mechanical Engineering


Program: B.Tech -ME

Academic Year :2021-2022

S.No	Course Code		CO No.	Course Outcome Description
1	21ME2209	NUMERICAL COMPUTATION FOR MECHANICAL ENGINEERS	CO1	Understand elementary programming concepts, and the basics in MATLAB
			CO2	Understand linear algebra, probability and statistics for solving engineering problems
			CO3	Solve a system through linear and nonlinear equations, and ordinary differential equations in Mechanical Engineering
			CO4	Select an appropriate numerical approach for solving engineering problems
			CO5	Ability to select bench marks to confirm the computational approach
2	21PH1010	MECHANICS	CO1	Apply the concept of forces, governing static equations and analyse planar system of forces.
			CO2	Use analytical techniques for analysing forces in statically determinate structures
			CO3	. Apply the concepts of planar and non-planar system of parallel forces and estimate the moment of inertia for lamina and material bodies
			CO4	.Apply the fundamental concepts of kinematics and kinetics of particles to solve simple practical problems.
3	20ME1103	DESIGN TOOLS WORKSHOP -I	CO1	Practice design thinking by developing artistic skills, Visualize and complete his/her innovative design by final drafting using 3D modeling
			CO2	Understand the concept of web page, web browser, web server, and able to create Static webpages
			CO3	Understand the concept of report writing using a markup language Latex
			CO4	Understand the concept of data visualization and creating data visualization dashboards, Understand the basic concept of VR/AR.
4	21SC1209	DESIGN TOOLS WORKSHOP-II	CO1	Practice the design ideology by 3D printing, 3D scanning techniques
			CO2	Visualize the design ideology by incorporating VR technique and VR technology, Visualize and present his design idea by applying AR technique and Hologram
			CO3	Practice of PCB technology
			CO4	Practice of Arduino based skill with different interfaces


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5	21ME1002	ENGINEERING GRAPHICS & 2D MODELLING	CO1	Model Engineering Curves in engineering Practice, Conic sections and special curves, scales both manually and using computer aided design tool (CAD).
			CO2	Project points, lines and planes in first angle third angle both manually and using CAD.
			CO3	Project solids and generate the sectional views of solids, development of surfaces of regular solids both manually and using CAD.
			CO4	Convert orthographic projections to create isometric view and isometric view to orthographic projection both manually and using CAD.
6	21ME2104	3D MODELING AND PHYSICAL PROTOTYPING (WORKSHOP & 3D MODELLING S/W)	CO1	Develop 3D modeling and assembling of machine elements
			CO2	Develop and interpret production drawing for various machine elements
			CO3	Prepare different components using Carpentry, Tin-smithy trade and apply basic electrical engineering knowledge for house wiring practice.
			CO4	Prepare different components using various manufacturing techniques and perform various machining operations.
7	21EE2205	CIRCUITS AND ELECTRONICS	CO1	Understand the Basic of Electrical network elements
			CO2	Understand the behavior of semiconductor switches and its applications
			CO3	Apply Time & frequency domain analysis of first & second order networks
			CO4	Understand the Applications of Analog & Digital circuits
8	21ME2105	THERMODYNAMICS	CO1	Understand the fundamentals of thermodynamic systems and Processes.
			CO2	Apply first law of thermodynamics to various flow and non-flow processes.
			CO3	Apply second law of thermodynamics and principle of entropy to Engineering Devices.
			CO4	Apply the thermodynamic principles to estimate the performance of air standard cycles and psychrometric processes.
9	21ME2106	FLUID MECHANICS & HYDRAULIC MACHINES	CO1	Understand physical laws related to fluid statics and buoyancy.
			CO2	Apply continuity, Euler and Bernoulli equations in various fluid flow situations.
			CO3	Understand and apply momentum equation and boundary layer
			CO4	Apply fluid dynamical principles to hydraulic machines.
			CO5	Conduct experiments to verify and apply various fluid flow principles and performance evaluation of various hydraulic machines like turbines and pumps
10	21ME2210	ANALYSIS OF THERMAL SYSTEMS (CFD & Linked to Project)	CO1	Estimate the properties of pure substance using property tables
			CO2	Apply the principles of thermodynamics to estimate the performance of vapor power cycles
			CO3	Apply the principles of thermodynamics to various refrigerating systems
			CO4	Estimate the performance of Air conditioning systems
			CO5	Analyze internal & external fluid flows through a commercial package Ansys - Fluent
			CO1	Apply Fourier law of conduction and combined conduction convection concepts to 1-D heat transfer problems.
			CO2	Analyze heat transfer using extended surfaces, unsteady state heat transfer and 2-D conduction mode of heat transfer



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11	21ME3115	HEAT TRANSFER	CO3	Solve problems on convection mode of heat transfer and heat transfer during phase change
			CO4	Apply the principles of heat transfer to analyze and design different heat exchangers.
			CO5	Experimental verification of various heat transfer parameters
12	21ME3119	HEAT POWER ENGINEERING	CO1	Estimate dimensional parameters of various steam nozzles including convergent and divergent nozzles and efficiency of condensers
			CO2	Apply the principles of thermodynamics to various Steam turbines to determine their performance
			CO3	Understand and analyze the performance of gas turbines
			CO4	Apply the principles of thermodynamics to various rotary machines to determine their performance
14	21ME2101	MECHANICS OF SOLIDS	CO1	Analyze stresses in members with axial loading or torsion
			CO2	Analyze members with multi axial loading and lateral loading.
			CO3	Analyze deflections and stresses in beams
			CO4	Analyse columns and pressure vessels
			CO5	Apply the theoretical concepts to conduct various experiments of strength of materials practically and analyze the data
15	21ME2208	MECHANICAL ENGINEERING DESIGN & INNOVATION (Analysis S/W)	CO1	Selection of appropriate materials in mechanical design
			CO2	Emphasize the fundamentals of mechanical behavior of materials
			CO3	Design of machine components for static strength
			CO4	Design of machine components for fatigue strength
			CO5	Analyse the effect of various loads on Mechanical components
			CO6	Design and execute a fully functional prototype
16	21ME2211	KINEMATICS OF MACHINES (With Adams s/w)	CO1	Synthesize and analyze kinematically suitable mechanisms for required motion of machinery
			CO2	Analyze velocity and acceleration diagrams and interpret the data
			CO3	Construct cam profiles and Analyze gears and gear trains kinematically
			CO4	Analyze gears and gear trains kinematically Analyze mechanisms dynamically
			CO5	Apply the theoretical concepts to analyse different mechanisms by using the simulation software for data analysis.
17	21ME3118	DYNAMICS OF MACHINES	CO1	Analyze the effect of the Gyroscopic couple in vehicles
			CO2	Determine the unbalance in rotating and reciprocating machines
			CO3	Analyze the forces in linkages
			CO4	Determine the frequencies in damped and undamped vibrating system
			CO5	Apply the theoretical concepts to analyse different mechanisms by using the simulation software for data analysis.
18	21ME3113	MACHINE DESIGN(Linked to project)	CO1	Design of shafts and couplings
			CO2	Design of fasteners
			CO3	Selection of appropriate bearings and drives
			CO4	Design of gears
			CO5	Design various mechanical systems
			CO1	Understand crystallography and various material testing methods
			CO2	Understand and distinguish various types of materials based on their engineering applications
			CO3	Apply the concepts of cooling curves and phase diagrams


19	21PH2007	MATERIALS TECHNOLOGY	CO4	Analyse various heat treatment process and their strengthening mechanisms.
			CO5	Gain hands on experience to conduct various experiments of metallography and heat treatment process practically.
20	21ME2107	MANUFACTURING PROCESSES	CO1	Understand and apply the casting processes
			CO2	Apply the welding processes and identify the faults in welding processes
			CO3	Apply principles of cold/hot forming processes
			CO4	Apply sheet metal processes and design sheet metal dies.
			CO5	Fabricate the parts using manufacturing processes
21	21ME2212	MANUFACTURING TECHNOLOGY(Linked to Project)	CO1	Understand and analyze metal cutting processes
			CO2	Understand working machine tools and related operations
			CO3	Understand Non-traditional machining processes
			CO4	Apply the automation of production lines
22	21ME3217	PRODUCTION TECHNOLOGY	CO5	Implement modern manufacturing techniques
			CO1	Understand the concepts of Computer aided design & Manufacturing
			CO2	Apply concept of linear and angular measurements in metrology
			CO3	Understand about forecasting models and predict future demand
23	21ME3116	OPTIMIZATION TECHNIQUES	CO4	Apply various production scheduling techniques to optimize productivity.
			CO1	Identify Optimum solutions for various single objective problems using Linear Programming models
			CO2	Identify Optimum Solutions through Transportation and Assignment models
			CO3	Identify Optimum Solutions through Game theory, DPP, Queuing theory & Simulation models
24	21ME4120	INSTRUMENTATION & CONTROL	CO4	Solve project management problems using CPM, PERT and inventory
			CO1	To identify various measurement systems and their purpose in typical instruments
			CO2	Understand how to measure temperatures, flow and different level indicators
			CO3	To identify various instruments to measure stress-strain and Humidity parameters
25	21ME3114	INDUSTRY 4.0 & DESIGN OF CYBER PHYSICAL SYSTEMS	CO4	Understand elements of control systems
			CO1	Apply the basic principles of AI in solutions that require problem solving
			CO2	Implement the concepts of Robotics and its control
			CO3	Implement the concepts of IoT and its applications
26	21ME4051	THEORY OF ELASTICITY AND PLASTICITY	CO4	Understand the concepts of Cloud Technology
			CO1	Analyze stresses and strains in planes in elastic or plastic region
			CO2	Solve 2-D problems in rectangular Components
			CO3	Analyze stresses and strains in 3-D problems
27	21ME4052	FINITE ELEMENT METHOD	CO4	Analyze Beams and frames in plasticity applications
			CO1	Analyze one DOF free and forced undamped vibration systems
			CO2	Analyze and control of one DOF forced damped vibration systems
			CO3	Analyze and control of Two and Multi DOF vibration systems
28	21ME4053	MODELING, ANALYSIS & DESIGN OF ROBOTIC SYSTEMS	CO4	Analyze continuous systems and vibration measurement.
			CO1	Apply the forward and inverse dynamics for robots
			CO2	Model and simulate of motion of robots and manipulators
			CO3	Kinematic modeling and analysis of mechanical and robotic systems
			CO4	Implementation of the control on mechanical / robotic systems


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29	21ME4054	CREEP, FATIGUE AND FRACTURE MECHANICS	CO1	Assess the failure of unflawed structural components
			CO2	Assess the fatigue life of structural components under the specified load spectrum
			CO3	Evaluate the fracture toughness and assess the life of flawed structural components
			CO4	Assess the life of structural components under creep
30	21ME4055	ADVANCED STRENGTH OF MATERIALS	CO1	Analyze statically indeterminate beams
			CO2	Analyze stresses in curved beams and identify the Shear Centre for various cross sections of beams
			CO3	Apply unit load method to find deflections in beams and structures
			CO4	Analyze stresses in rotating members and thick cylinders
			CO5	To simulate the structural members using ANSYS and validate the results with analytical methods
31	21ME4056	MECHANICS OF COMPOSITES	CO1	Know the composite materials and manufacturing methods
			CO2	Identify the behavior of composite Lamina at micro level
			CO3	Identify the behavior of composite Lamina at macro level
			CO4	Apply Failure theories to calculate stresses in composite materials
32	21ME4057	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN ENGINEERING DESIGN	CO1	apply all fundamental concepts related to the streams in Engineering Design Specialization
			CO2	identify the real-world problem and inculcate problem solving and critical thinking skills
			CO3	Develops a conceptual prototype on software tools
			CO4	Design and execute a fully functional prototype
33	21ME4061	MODERN MANUFACTURING PROCESSES	CO1	understand the working principle and the effect of various process parameters of mechanical energy-based machining processes
			CO2	understand the working principle and the effect of various process parameters of chemical and thermoelectric energy-based machining processes
			CO3	understand the working principle and the effect of various process parameters on the performance of various Non-Traditional Welding processes.
			CO4	Understand the working principle of various Non-Traditional forming processes
			CO5	Perform various non traditional manufacturing for product making
34	21ME4062	ADDITIVE MANUFACTURING	CO1	Distinguish between the hype and realities of additive manufacturing
			CO2	understand the basic AM processes, and the limitations and advantages of each.
			CO3	Understand the differences between traditional processes and additive manufacturing production, including the differences in design methodology.
			CO4	Use AM terminology properly and understand the role and importance of standards in the additive manufacturing industry.
			CO5	Apply additive manufacturing in product making
35	21ME4063	ADVANCED MATERIALS	CO1	Understand various types of materials involved in manufacturing Composites.
			CO2	Understand the importance of Bio, Smart and microelectronic materials.
			CO3	Understand the significance of functionally graded materials and their applications.


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			CO4	Understand synthesis and fabrication methods of nanomaterial and to study characterization techniques.
36	21ME4064	FLEXIBLE MANUFACTURING SYSTEMS	CO1	Analyze various production schedules and plant layouts.
			CO2	Apply the concept of group technology to the development of FMS.
			CO3	Identify hardware and software components of FMS.
			CO4	Analyze materials handling and storage system in FMS.
			CO5	Implement NC part programming in part production
37	21ME4065	ROBOTICS & INDUSTRIAL AUTOMATION	CO1	Identify role of robotics in Industrial Automation
			CO2	Identify Safety in Industrial Automation
			CO3	Identify and understand the types of Industrial Sensors
			CO4	Identify Practical Programmable Logic Controller Applications
38	21ME4066	REVERSE ENGINEERING AND RAPID PROTOTYPING	CO1	Understand the need of reverse engineering
			CO2	Understand working principles of RP techniques
			CO3	Understand Rapid tooling and RP case studies
			CO4	Understand applications of RP techniques
39	21ME4067	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN SMART MANUFACTURING	CO1	Apply all fundamental concepts related to the streams in smart manufacturing Specialization
			CO2	Identify the real-world problem and inculcate problem solving and critical thinking skills
			CO3	Develop a conceptual prototype
			CO4	Design and execute a fully functional prototype
40	21ME4071	AUTOMOBILE ENGINEERING	CO1	Understand various principles, components, classification of vehicles in an automobiles.
			CO2	Understand working of Engine cooling system, coolant properties and combustion chambers.
			CO3	Understand various lubricating systems, its properties and transmission systems of an automobile.
			CO4	Understand the concepts of Suspension system and Vehicle control in an Automobile.
			CO5	Able to apply the various concepts of Automobile engineering using simulation and analysis through suitable software's.
41	21ME4072	HYBRID & ELECTRIC VEHICLE DESIGN	CO1	Understand the functioning of electric vehicle components and comparison with Internal combustion
			CO2	Determine the Motor Torque Calculations for Electric Vehicle
			CO3	Understand the classification of Electric vehicles and working of various fuel cells.
			CO4	Understand the importance and working of motors in Electric drive.
42	21ME4073	AUTOTRONICS & SAFETY	CO1	Understand various principles, characteristics, testing, maintenance, and servicing of batteries.
			CO2	Understand working of ignition system of an S I engine, its maintenance and service.
			CO3	Understand wiring for Auto electrical systems for I C Engines.
			CO4	Understand the concepts of safety for various domains in automobiles.
			CO5	Apply the various concepts of Automobile engineering using electronics through suitable softwares.
43	21ME4074	ROBOTICS & INDUSTRIAL AUTOMATION	CO1	Explain the General function of Industrial Automation
			CO2	Identify Safety in Industrial Automation,
			CO3	Identify and understand the types of Industrial Sensors
			CO4	Identify Practical Programmable Logic Controller Applications
		AUTOMOTIVE	CO1	Understanding battery, Cranking motor construction and testing methods.
			CO2	Understand the principle of alternator and to test the alternator.
			CO3	Understand the Electronic Controls in Gasoline Engine.


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44	21ME4075	ELECTRICAL AND ELECTRONICS SYSTEM	CO4	Understand the basics of Vehicle Motion Control and telematics system
			CO5	Perform OBD II test on vehicle and Program MYRIO hardware using Lab view.
45	21ME4076	AUTOMOBILE ENGINE SYSTEM AND PERFORMANCE	CO1	Apply the knowledge of basic engine technology along with principle. Summaries of Engine Cycles.
			CO2	Apply the concept performance aspect of mixture preparation and ignition system for SI and CI Engines and Combustion in
			CO3	Pollutant Formation, Emission control methods and Emission norms
			CO4	Engine Testing, Performance analysis and Emerging Engine Technologies
			CO5	Experiments on I C Engines for performance calculation
46	21ME4077	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN AUTOMOBILE ENGINEERING	CO1	Able to know all fundamental concepts related to the courses in Automobile Engineering Specialization
			CO2	Able to gain hands-on experience on all relevant software tools
			CO3	Able to identify the real-world problem and inculcate problem solving and critical thinking skills
			CO4	Design and execute a fully functional prototype
47	21ME4081	AUTOTRONICS	CO1	Understand the automotive electronics for engine management system
			CO2	Analyze required sensors and actuators for an automotive application
			CO3	Apply the suitability of a control system for automotive application
			CO4	Ability to analyze of electronic system for automotive applications
48	21ME4082	AUTOMOTIVE SENSOR AND APPLICATIONS	CO1	Learn the sensor classification and sensor product selection guide.
			CO2	Analyze the measurement of engine parameter using sensor.
			CO3	Apply required sensors and actuators for automotive applications
			CO4	Analyze the sensors for intelligent transport systems
			CO5	Practically study the various Sensors used in automobiles
49	21ME4083	ELECTRONIC ENGINE MANAGEMENT SYSTEM	CO1	Understand the automotive instruments and automotive sensors
			CO2	Learn the measurement of engine parameter by using sensor.
			CO3	Acquire ability to analyze the electronic fuel injection system
			CO4	Apply the principles of digital control techniques and the application of on board diagnosis
			CO5	Experiments on computerized Diesel Engine and Lab view based engine control init.
50	21ME4084	INSTRUMENTATION IN AUTOMOTIVE INDUSTRIES	CO1	Understand the knowledge of various Measuring Instruments to design a simple Instrumentation system
			CO2	Analyze the various instruments and use them in various fields
			CO3	Learn and apply the measuring instruments in various industries application
			CO4	Analyze suitable instrument for a given application
51	21ME4085	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN AUTOMOBILE ENGINEERING	CO1	Acquire comprehensive knowledge on Automotive Electric and Electronic Systems with diagnosis and service
			CO2	Understand the technologies embedded in Automotive systems with applications
			CO3	Comprehend about Vehicle Intelligence and the applications in modern vehicles
			CO4	Explore and conjecture the emerging technologies in Autonomous Vehicles with future aspects


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			CO5	Practical Implementation of electronics embedded in automotive technology using NI LABVIEW software
52	21ME4086	AUTONOMOUS VEHICLE DESIGN	CO1	Understand the rationale for and evolution of automotive electronics and understand which automotive systems have been replaced by electronic control systems
			CO2	Understand the fundamental theory of operation of electronic control systems and basics of how automotive ECUs function in conjunction with the vehicle data bus networks and sensors
			CO3	Become familiar with the various types of advanced driver assistance systems and Understand the concept of cyber-physical control systems and their application to collision avoidance and autonomous vehicles
			CO4	Understand the concept of remote sensing and the types of sensor technology needed to implement remote sensing and Understand the basic concepts of wireless communications and wireless data networks
53	21ME4087	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN AUTOTRONICS	CO1	Able to know all fundamental concepts related to the courses in Autotronics specialization
			CO2	Able to gain hands-on experience on all relevant software tools
			CO3	Able to identify the real-world problem and inculcate problem solving and critical thinking skills
			CO4	Design and execute a fully functional prototype
54	21ME4091	DESIGN FOR QUALITY AND RELIABILITY	CO1	Model repairable and non-repairable systems and calculate failure rate, repair rate, reliability and availability
			CO2	Use various probability density distributions significant to reliability calculations
			CO3	Fit a given failure data set of a product into a Weibull distribution and estimate the reliability parameters.
			CO4	Preventive maintenance failure modes and effects
55	21ME4092	DESIGN OF AGRICULTURAL PRODUCTS & MACHINERY	CO1	Design and selection of machinery elements required for Agricultural machinery
			CO2	Measurement of force, stress, torque, speed, displacement and acceleration on machine elements
			CO3	Study of Design considerations on Farm Machinery
			CO4	Study of Design considerations on Tractors and Power tillers
56	21ME4093	DESIGNING INTELLIGENCE SYSTEMS	CO1	Principles of complex and living systems
			CO2	Concepts such as Information intensity & Knowledge
			CO3	Introduction to emerging digital technologies
			CO4	Apply these ideas in design
57	21ME4094	SUSTAINABLE DESIGN	CO1	To equip the design student with specific environmentally-responsive tools, principles.
			CO2	To understand the methodologies in preparation for professional application management.
			CO3	To use a variety of techniques to communicate effectively
			CO4	To understand the life-cycle assessment methods
58	21ME4095	SYSTEMS THINKING FOR DESIGN	CO1	The importance of modeling systems to realize effective designs
			CO2	Abstraction of key elements from problem situations
			CO3	Use of specific techniques to model problems in a holistic manner
			CO4	Use of specific techniques for self-regulating systems
59	21ME4096	DESIGN WITH ADVANCED ENGINEERING MATERIALS	CO1	Understanding selection of materials for various engineering application
			CO2	Understanding the need of high temperature materials (super-alloys)
			CO3	Understanding the need of engineering plastics, elastomers
			CO4	Understanding the need of ceramics, and coatings


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60	21ME4097	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN PRODUCT DESIGN	CO1	Able to know all fundamental concepts related to the courses in Product Design Specialization
			CO2	Able to gain hands-on experience on all relevant software tools
			CO3	Able to identify the real-world problem and inculcate problem solving and critical thinking skills
			CO4	Design and execute a fully functional prototype
61	22ME4101	HYDROGEN AND FUEL CELL TECHNOLOGIES	CO1	Understand various properties of hydrogen and various production methods
			CO2	Understand hydrogen storage methods and employing hydrogen as fuel for IC engine
			CO3	Understand fuel cell basics and Fuel cell thermodynamics
			CO4	Understand fuel cell reaction kinetics
			CO5	Analyze various hydrogen systems and fuel cells using Trnsys and COMSOL Multiphysics
62	22ME4102	AR ENERGY TECHNOLO	CO1	Understand the basics of solar radiation and working principle of various solar collectors
			CO2	Understand the working of solar thermal systems
			CO3	Understand the fundamentals of Solar PV technology
			CO4	Apply the knowledge of thermodynamics and heat transfer to calculate the performance of solar PV systems
			CO5	Analyze various solar thermal and PV systems using TRNSYS software
63	22ME4103	ADVANCED ENERGY STORAGE SYSTEMS	CO1	Understand the basics of Energy storage systems and its applications
			CO2	Modelling of various thermal energy storage systems
			CO3	Understand the construction and working of various electrical storage systems
			CO4	Understand the principles of alternate energy storage technologies
			CO5	Analyze various energy storage systems using MATLAB/Simulink
64	22ME4104	ENERGY AUDIT AND MANAGEMENT	CO1	Understand the fundamentals of Energy economics
			CO2	Apply the Engineering principles to estimate the energy conservation in steam generators and compressed air generators
			CO3	Apply the Engineering principles to estimate the energy conservation in rotary equipment, Refrigeration & Air conditioning systems
			CO4	Apply the Engineering principles to estimate the energy conservation in cooling towers and lighting systems
65	22ME4104	COMPUTATIONAL FLUID FLOW AND HEAT TRANSFER – FDM APPROACH	CO1	Understand the basics of PDE and FDM
			CO2	Apply FDM to Steady one- and two-dimensional heat conduction equations
			CO3	Apply FDM to Unsteady one- and two-dimensional heat conduction equations
			CO4	Understand the modified equations of FD formulation
			CO5	Development of codes for various fluid flow and heat transfer problems in C++/Matlab following FDM
66	21ME4105	CFD FOR COMPRESSIBLE AND INCOMPRESSIBLE FLOWS	CO1	Understand the basics of various convective schemes, FVM discretization
			CO2	Solve N-S equations for incompressible flows using stream function – vorticity formulation and Pressure-velocity coupled algorithms
			CO3	Solve N-S equations for compressible flows using MacCormack, Jameson algorithm
			CO4	Understand turbulence modelling
			CO5	Analyze various fluid flow and heat transfer problems using Matlab programming/Ansys – Fluent following FVM

67	22ME4106	THERMAL MANAGEMENT OF ELECTRIC AND ELECTRONIC SYSTEMS	CO1	Apply the concepts of heat transfer to various electric and electronic systems requiring heat dissipation
			CO2	Apply different cooling techniques to microchannels, heat pipes and vapor chambers
			CO3	Apply various thermal management techniques in the fields of automobiles and electronics
			CO4	Analyze the Battery thermal management system and battery pack design



Professor I/C Academics



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