SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

COURSE OUTCOMES
2020-21 III B.TECH II SEM

CO NUMBER	COURSE OUTCOME(CO)STATEMENT –AT THE END OF THE COURSE ,THE STUDENTS WILL BE ABLE TO	BLOOMS TAXONOMY
	METROLOGY(C321)	
C321.1	Explain the principles of Limits & Fits and Analyze various types of Fits	Analyze
C321.2	Explain the principles of linear and angular measurement	Understand
C321.3	Describe the concepts and principles of optical measuring instruments and interferometry	Understand
C321.4	Use the concept of surface roughness measurement and explain the working of Comparators.	Apply
C321.5	Demonstrate the principles of Gear teeth and screw thread measurement	Apply
C321.6	Test the flatness and machine tool alignment	Analyze
	INSTRUMENTATION & CONTROL SYSTEMS(C322)	
C322.1	Explain the Principle of measurement and measurement of displacement	Understand
C322.2	Analyze measurement of parameters like temperature and pressure.	Analyze
C322.3	Analyze measurement of parameters like speed, pressure	Analyze
C322.4	Describe method of usage of resistance strain gauge	Apply
C322.5	Analyze measurement of parameters like humidity, flow velocity	Analyze
C322.6	Explain elements of control systems & its classification	Remember
	REFRIGERATION & AIR-CONDITIONING(C323)	
C323.1	Demonstrate the fundamental principle of RAC	Apply
C323.2	Examine the performance of VCR system	Analyze
C323.3	Discuss the properties, applications and environmental issues of different refrigerants and VCR components	Understand
C323.4	Differentiate the working principles of Vapor Absorption refrigeration system and Steam jet refrigeration systems	Analyze
C323.5	Appraise thecooling and heating loads in an Air Conditioning systems	Evaluate
C323.6	Identify Air Conditioning system components	Understand

	HEAT TRANSFER(C324)	
C324.1	Understand the basic laws of heat transfer and temperature distribution in solids	Understand
C324.2	Analyse the fins and unsteady heat conduction	Analyze
C324.3	Understand and Apply Dimensional analysis on heat transfer	Apply
C324.4	Solve the problems related to free and forced convection	Analyze
C324.5	Analyse heat exchangers by LMTD and NTU methods along with Understanding of the phenomenon of boiling and condensation	Analyze
C324.6	Understand the phenomenon of thermal radiation.	Understand
	INDUSTRIAL ROBOTICS(C325)	
C325.1	Identify various robot configuration and components.	Understand
C325.2	Compare Electric, Hydraulic and Pneumatic types of locomotion devices.	Analyze
C325.3	Solve the kinematic problems and Establish relation among the links of a robot using D-H notations	Apply
C325.4	Execute dynamic analysis for simple serial kinematic chains	Apply
C325.5	Organize trajectory planning for a manipulator by avoiding obstacles.	Analyze
C325.6	Select appropriate actuators and sensors for a robot based on specific application	Understand
	HEAT TRANSFER LAB (C326)	
C326.1	Understand the basic laws of heat transfer and temperature distribution in solids	Understand
C326.2	Analyse the fins and unsteady heat conduction	Analyze
C326.3	Understand and Apply Dimensional analysis on heat transfer	Apply
C326.4	Solve the problems related to free and forced convection	Analyze
C326.5	Analyse heat exchangers by LMTD and NTU methods along with Understanding of the phenomenon of boiling and condensation	Analyze
C326.6	Understand the phenomenon of thermal radiation.	Understand
	METROLOGY & INSTRUMENTATION LAB(C327)	
C327.1	Understand the principles of Limits & Fits and Analyze various types of Fits	Analyze
C327.2	Understand the principles of linear and angular measurement	Understand
C327.3	Understand the concepts and principles of optical measuring instruments and interferometry	Apply

C327.4	Understand the concept of surface roughness measurement and working of Comparators.	Apply
C327.5	Understand the principles of Gear teeth and screw thread measurement	Apply
C327.6	Understand the concept of measurement of flatness and machine tool alignment test	Apply
COMPUTATIONAL FLUID DYNAMICS LAB(C328)		
C328.1	Apply the basic fundamentals transcendential equations,simultaneous ,algebraic equations,ordinary differential equation	Apply
C328.2	Describe the mathematical basis in differentiation and Integration ,partial differential equation	Understand
C328.3	Explain the difference Tri-diagonal matrix using Thomas Algorithm	Understand
C328.4	Distinguish steady state conduction	Analyze
C328.5	Solve Lumped heat transfer, convective heat transfer	Apply
C328.6	Solve Radiation heat transfer	Apply
PROFESSIONAL ETHICS & HUMAN VALUES(C329)		
C329.1	To understand the concepts of human values.	Understand
C329.2	To understand the principles of harmony	Understand
C329.3	To gain knowledge about the principles of engineering ethics & interpret engineering as social experimentation.	Understand
C329.4	To understand engineers' responsibility for safety and risk	Understand
C329.5	To gain knowledge about the engineers' rights and responsibilities.	Understand
C329.6	To know the ethical aspects our cultural issues	Understand

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