



Department Of Mechanical Engineering
Course Outcome of Mechanical Engineering of Fifth Semester

COURSE NAME: HEAT TRANSFER

COURSE CODE: 5ME01

CO1	Analyze the thermal systems by applying the fundamental concept of conduction, convection and radiation.
CO2	Apply the laws of radiations to heat transfer systems
CO3	Evaluate the heat transfer coefficients for forced and free convection.
CO4	Analyze the performance of heat exchangers

COURSE NAME: Metrology and Quality Control

COURSE CODE: 5ME02

CO1	Understand the concept of inspection, quality control and its importance to industry.
CO2	Demonstrate the skills of controlling various out of control processes using statistical quality control tools.
CO3	Understand the importance of improving production and productivity using Various Non Destructive Testing approach.
CO4	Apply the knowledge of various measurement standards and techniques in the industry to measure various parameters related to metrology.

COURSE NAME: Kinematics of Machines

COURSE CODE: 5ME03

CO1	Explain the concept of link, kinematic mechanisms, machines, inversions and their applications.
CO2	Analyze the mechanisms and machines on the basis of velocity and acceleration.
CO3	Apply the graphical and analytical methods for analysis and synthesis of mechanisms for the input- output coordination.
CO4	Explain the working principle and applications of different types of brakes, clutches, dynamometers and gear trains.



COURSE NAME: Measurement Systems

COURSE CODE: 5ME04

CO1	Identify types, functional elements of Measurement system and types of input to the measurement system.
CO2	Use the concepts of general performance characteristics for choosing measuring instrument.
CO3	Demonstrate process of calibration of instruments.
CO4	Select and use instrument for various physical quantities.

COURSE NAME: Industrial Robotics and Applications(Open Elective-I)

COURSE CODE: 5ME05

CO1	Illustrate Robot's anatomy, joints types, wrist construction, robot standard configurations and their work space.
CO2	Explain the construction and working of different types of End Effectors.
CO3	Explain various robot drives, robot motion control and its levels.
CO4	Explain various methods of teaching and programming the robots.
CO5	Explain principle of working and applications of different types of robot sensors.
CO6	Identify a particular type of robot depending on the its application in manufacturing.