DEPARTMENT OF MECHANICAL ENGINEERING
COURSE OUTCOME OF ALL COURSES OF SIXTH SEMESTER

COURSE NAME: Design of Machine Elements
COURSE CODE: 6ME01

CO1	1 Apply principles and design considerations used in machine design
CO2	2 Design different temporary and permanents joints for static loading
CO3	3 Design shafts and couplings for various applications for static loading
CO4	4 Design bearings for various applications and IC engine parts
CO5	5 Utilize design data books in designing various machine elements
CO6	6 Generate geometric model/drawings using dimensions of designed machine elements

COURSE NAME: Dynamics of Machines
COURSE CODE: 6ME02

CO1	Apply the concept of static force analysis to kinematic mechanisms.
CO2	Apply the concept of the dynamic force analysis to kinematic mechanisms.
CO3	Apply the concept of gyroscopic couple and forces on a dynamic body.
CO4	Apply the basics of longitudinal vibrations and determine the natural frequency of the vibrating system.
CO5	Apply the basics of transverse vibrations and calculate the natural frequency of the vibrating system.
CO6	Evaluate the balancing masses and their orientation for balancing of the rotating and reciprocating masses.

COURSE NAME: Control System Engineering
COURSE CODE: 6ME03

CO1	Demonstrate the fundamental concepts of automatic Control, mathematical modeling & determination of the transfer function of control systems using various methods
CO2	Analyze the time response of various systems & determine the Static error coefficients for different input & type of the systems
CO3	Evaluate the stability of linear systems using various methods.
CO4	Design and selection of industrial controller and Understanding of automatic speed controllers for Machine tools, Prime Movers and Steam Generator.

COURSE NAME: Non-Conventional Energy Sources
COURSE CODE: 6ME04

CO1	Illustrate basic concept of renewable and non-renewable sources
CO2	Apply the basic concept of solar energy utilization and storage.
CO3	Illustrate basics working of photovoltaic panel, fuel cell and geothermal energy
CO4	Apply the concept of energy from ocean
CO5	Apply the concept of energy from wind.

CO6	Demonstrate understanding the concept of bio-mass energy resources.

COURSE NAME: Lean Manufacturing
COURSE CODE: 6ME04

CO1	Explain the concept and applications of lean manufacturing
CO2	Interpret different element of lean manufacturing
CO3	Interpret different tools of lean manufacturing
CO4	Apply lean manufacturing in real life situation
CO5	Identify the barriers in implementation of Lean Manufacturing.
CO6	Explain the concept of Six Sigma

COURSE NAME: Computer Aided Design and Simulation
COURSE CODE: 6ME08

CO1	Understand the concept of CAD.
CO2	Apply knowledge using CAD modeling for component design
CO3	Apply the knowledge of geometric transformation.
CO4	Construct the Mechanical & Manufacturing simulation systems