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

COURSE NAME: Mechatronics
COURSE CODE:7ME01

CO1	Explain the scope and application of mechatronics, various electromechanical devices and components.
CO2	Explain the concepts of electronics signal data and data conversion.
CO3	Explain the working and applications of various electronic devices.
CO4	Illustrate the working of different control components of Hydraulic and Pneumatic Systems.
CO5	Construct pneumatic circuits used in mechanical line automation for industrial applications.

COURSE NAME: Productivity Techniques
COURSE CODE:7ME02

CO1	Apply project selection methods to evaluate the feasibility of projects.
CO2	Use appropriate project management practices, tools and methodologies.
CO3	Analyze and document project requirements, assumptions and constraints.
CO4	Apply project time and cost estimates to define project baseline, schedule and budget.
CO5	Organize and manage critical resources for effective project implementation.
CO6	Analyze risks in implementing project.

COURSE NAME: Industrial Management & Costing
COURSE CODE:7ME03

CO1	Apply the concepts of Management and Finance for industry.
CO2	Apply the process of Marketing , Promotions and sales to serve the demands of society.
CO3	Analyze the concepts of estimation, costing and balance sheet for the industry.
CO4	Plan for managerial and financial activities for the industry

COURSE NAME:Energy Conversion
COURSE CODE: 7ME04

CO1	1 Analyze the performance of reciprocating compressor.
CO2	2 Analyze the performance of rotary compressor.
CO3	3 Solve the problems based on refrigeration cycles.
CO4	4 Explain different air conditioning system and psychrometric process.
CO5	5 Solve the problems based on gas turbines.
CO6	6 Explain the working of electric and hybrid vehicles.

COURSE NAME: Automobile Engineering (Professional elective-II)

COURSE CODE:7ME05

CO1	1 Compare the different types of automobiles and their working
CO2	2 Analyze the concepts of fuels supply system and cooling system in automobile
CO3	3 Identify the need of different electrical systems in conventional automobile and Electrical Vehicles(E.V)
CO4	4 Explain the functioning of Transmission, Suspension, lubrication and control systems in Automobile.

COURSE NAME: Computational Fluid Dynamics(Professional elective-II)
COURSE CODE:7ME05

CO1	Solve the governing partial differential equations of fluid flow and heat transfer problems
CO2	Construct and solve different mathematical models and computational methods for fluid flows
CO3	Apply the discretization method to solve fluid flow and heat transfer problems
CO4	Examine a CFD scheme for the respective fluid flow/transport phenomenon problem
CO5	Apply verification and validation of numerical model
CO6	Demonstrate the ability to use modern CFD Software tools