DRONACHARYA
College of Engineering

Khentawas, Farrukh Nagar, Gurugram, Haryana
Approved by: All India Council for Technical Education (AICTE), New Delhi
Affiliated to: Gurugram University, Gurugram

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2023-24

SEMESTER VII

Design of Machine Element-II (PCC-ME-401G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Expose the students to the Design for Production and for variable loading.
(CO2)	Impart in depth knowledge of designing of screws and different types of fasteners.
(CO3)	Design bearings, selection of bearings for different aspects & lubricants with their properties.
(CO4)	Knowledge of gears, design of different types of gears with consideration of maximum power transmission and gear lubrication.
(CO5)	Learn in depth knowledge of flywheels and their design.

Entrepreneurship Development (PCC-ME-403G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Students will be able understand who the entrepreneurs are and what competences needed
(CO2)	Students will be able to understand insights into the management, opportunity search, identification of a product, market flexibility studies, project finalization etc. required for small business enterprise.
(CO3)	Students will be able to write a report and do oral presentation on the topics such as product identification, business ideas, export marketing etc.
(CO4)	Students will be able to know the different financial and other assistance available for establishing small industrial units.

REFRIGERATION & AIR CONDITIONING (PEC-ME-401G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the air refrigeration, vapour compression refrigeration, vapour absorption, steam jet refrigeration systems and different type of refrigerants.
(CO2)	Expedite the working of single stage, multistage and cascade refrigeration.
(CO3)	Knowledge of psychrometry and different psychrometric processes. Understand and evaluate cooling and heating load and design of HVAC system.
(CO4)	Develop and design RAC systems and evaluate different expansion and control devices.

PROJECT MANAGEMENT (PEC-ME-403G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	They properly understand the concepts of Project Management, how it work.

NUMERIC CONTROL OF MACHINE TOOLS AND ROBOTICS (PEC-ME-405G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	They properly understand the concepts of basic knowledge of machine tools and robotics and also automation concepts.

FINITE ELEMENT ANALYSIS (PEC-ME-407G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	understand the FEM formulation and its application to simple structural and thermal problems

NOISE AND VIBRATIONS (PEC-ME-409G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamentals of mechanical vibrations leading to analysis of first degree of freedom
(CO2)	To understand the concept of two degree of vibration and vibration isolation and transmissibility
(CO3)	Analyse experimental methods for vibration analysis.
(CO4)	Understanding the influence and stiffness coefficients.
(CO5)	Analyse the concept of the non-linearity in vibrations and also concept of noise.

SOLAR ENERGY ENGINEERING (PEC-ME-411G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the concept and principles of solar system.
(CO2)	Utility and applications of solar system and the associated with energy conversion issues.

TRIBOLOGY (PEC-ME-413G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	To understand about the basic concept of tribology and use of engine, wear, friction .

COMPOSITE MATERIALS (PEC-ME-415G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	overview of the mechanical behaviour and application of composite materials and their fabrication methods and testing.

Workshop Lab-III (LC- ME-403G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the vapour compression refrigeration system and vapour absorption system.
(CO2)	Application of different compressors used in refrigeration system.
(CO3)	Understand functioning of various control devices
(CO4)	Evaluate the COP of various refrigeration system such as vapour compression refrigeration system and vapour absorption system.
(CO5)	Knowledge of how the loading condition changes the COP of the system.

Constitution of India (MC-317G)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
(CO2)	Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
(CO3)	Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.
(CO4)	Discuss the passage of the Hindu Code Bill of 1956. The examination of the regular students will be conducted by the concerned college/Institute internally.