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 OFELECTRONIC AND COMUNICATION ENGINEERING

ACADEMIC YEAR 2023-24

SEMESTER VIth

CONTROL SYSTEMS (PCC-ECE302G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Characterize a system and find its steady state behaviour
(CO2)	Analyse the time domain specification and calculate steady state errors..
(CO3)	Investigate stability of a system using different tests
(CO4)	Illustrate the state space model of a physical system.

COMPUTER NETWORK (PCC-ECE304G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Visualise the different aspects of networks, protocols and network design models.
(CO2)	Examine various Data Link layer design issues and Data Link protocols.
(CO3)	Analyse and compare different LAN protocols.
(CO4)	Compare and select appropriate routing algorithms for a network.
(CO5)	Examine the important aspects and functions of network layer, transport layer and application layer in internetworking.

ENGINEERING ETHICS (HUM-ECE306G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	apply ethics in society
(CO2)	discuss the ethical issues related to engineering
(CO3)	realize the responsibilities and rights in the society
(CO4)	realize the importance of sustainable development

CMOS DESIGN (PCC-ECE308G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Examine the CMOS circuit's behaviour and its characteristics.
(CO2)	Design and realization of combinational & sequential digital circuits.
(CO3)	Interpret different Architectures and performance trade offs involved in designing and realizing the circuits in CMOS technology.
(CO4)	Design the Arithmetic blocks and Memory structures

MINI PROJECT/ELECTRONICDESIGN WORKSHOP (LC-ECE326G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Conceive a problem statement either from rigorous literature survey or from the requirements raised from need analysis.
(CO2)	Design, implement and test the prototype/algorithm in order to solve the conceived problem.
(CO3)	Write comprehensive report on mini project work.

BIO-MEDICAL ELECTRONICS (PEC-ECE310G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Apply the concept of electronic systems design in Bio- medical applications.
(CO2)	Examine the practical limitations on the electronic components while handling bio- substances.
(CO3)	Evaluate and analyze the biological processes like other electronic processes.
(CO4)	Familiar the various Bio Medical Measuring Instruments and therapeutic equipments.
(CO5)	Aware of electrical safety of medical equipments

VHDL AND DIGITAL DESIGN (PEC-ECE312G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Understand the need & application of hardware description language.
(CO2)	Modelling & simulations of various basic & advanced digital systems using VHDL.
(CO3)	Implementation of various basic & advanced digital systems using FPGAs.
(CO4)	Apply knowledge to design & implement combinational circuits & sequential circuits related to research & industry applications.

INTRODUCTION TO MEMS (PEC-ECE314G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Interpret the basics of micro/nano electromechanical systems including their applications and advantages
(CO2)	Recognize the use of materials in micro fabrication and describe the fabrication processes including surface micromachining, bulk micromachining and LIGA.
(CO3)	Analyze the key performance aspects of electromechanical transducers including sensors and actuators
(CO4)	Comprehend the theoretical foundations of quantum mechanics and Nano systems

SPEECH AND AUDIO PROCESSING (PEC-ECE316G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Mathematically model the speech signal
(CO2)	Analyze the quality and properties of speech signal.
(CO3)	Modify and enhance the speech and audio signals.

PYTHON PROGRAMMING (OEC-ECE318G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	For a given conceptual problem student will able to analyze the problem and write a program in python with basic concepts.
(CO2)	For a given problem of Strings and texts, student will able to analyze the problem and write a program in python with basic concepts involving strings and texts.
(CO3)	The knowledge of list and dictionary will enable student to implement in python language and analyze the same.
(CO4)	Student will able to write a program using functions to implement the basic concepts of object oriented programming language

PROBABILITY AND STOCHASTIC PROCESSES (OEC-ECE320G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Understand representation of random signals
(CO2)	Investigate characteristics of random processes
(CO3)	Make use of theorems related to random signals