

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

# DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING ACADEMIC YEAR 2023-24 SEMESTER VII

#### FIBER OPTICAL COMMUNICATION (PCC-ECE-401G)

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	Understand the working principles of the Optical communication systems.				
(CO2)	Understand the optical networks and characteristics of elements used for communication				
(CO3)	Understand modulation schemes and their utility for different networks.				
(CO4)	Analyze planning/budgeting of optical communication systems.				

#### **ANTENNAS AND PROPAGATION (PCC-ECE-402-G)**

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	Understand the working principles of the Antenna.				
(CO2)	Analyze the properties of different types of antennas and their design				
(CO3)	Design and mathematical analysis of various practical antennas and their feeding methods.				
(CO4)	Analyze performance of various antenna arrays and their comparison.				
(CO5)	Understand basic Concepts of Smart Antennas.				
(CO6)	Operate antenna design software tools and come up with the design of the antenna of required specifications				

#### **Neural Networks (PCC-CSE-401G)**

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	For a given conceptual problem student will able to analyze the problem and able to visualize in NN				
(CO2)	Students will be familiar with different NN models.				
(CO3)	Students will be able to understand the concept of learning in NN.				

## Neural Networks Lab (LC-CSE-421G)

Course Outcome (CO)	Details of Course Outcomes			
(CO1)	For a given conceptual problem student will be able to analyze the problem and able to visualize using NN			
(CO2)	Students will be familiar with different NN models and its implementation.			
(CO3)	Students will be able to understand the concept of learning in NN and its implementation.			

## Data Communication Networking & Security (PEC-ECE-411-G)

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	Describe the technical aspects of data communications on the Internet				
(CO2)	Analyze error detection/correction and flow control of data in the data network				
(CO3)	Configure the network component and assign IP address.				

## **Error Correcting Codes (PEC-ECE-412-G)**

Course Outcome (CO)	Details of Course Outcomes			
(CO1)	Understand the information theory and coding in the communication system.			
(CO2)	Understand the requirements error correcting codes in the communication system			
(CO3)	Analyze the various properties of different coding techniques used in digital communication systems.			
(CO4)	Illustrate the various coding techniques like, block codes, cyclic codes, convolution codes, etc			
(CO5)	Understand the various limitations of error correction and detection in coding technique			

## Material Science (OEC-PHY-101G)

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	Segregate crystals based on their structure and apply effects of defects on manipulating properties of solids.				
(CO2)	Distinguish between insulator, conductor and semiconductor. They should know the difference between intrinsic and extrinsic semiconductors and about the fermi level position in these semiconductors.				
(CO3)	Select various dielectric, magnetic materials for specific applications in different fields.				

## **ELECTRONIC PRINCIPLES (OEC-ECE-451-G)**

Course Outcome (CO)	Details of Course Outcomes			
(CO1)	Understand the working of electronic components.			
(CO2)	Understand the Digital System and various displays.			

#### FUNDAMENTALS OF MANAGEMENT (HSMC-08G)

Course Outcome (CO)	Details of Course Outcomes			
(CO1)	Evolution of Management and contribution of Management thinkers.			
(CO2)	Importance of staffing and training			
(CO3)	The concept of material management and inventory control			
(CO4)	The components of marketing and advertising			
(CO5)	Various sources of finance and capital structure			

## **DISASTER MANAGEMENT (OEC-CE-451G)**

Course Outcome (CO)	Details of Course Outcomes				
(CO1)	To know natural as well as manmade disaster and their extent and possible effects on the economy.				
(CO2)	To Plan national importance structures based upon the previous history				
(CO3)	To acquaint with government policies, acts and various organizational structures associated with an emergency.				
(CO4)	To know the simple dos and don'ts in such extreme events and act accordingly.				