



Khentawas, Farrukh Nagar, Gurugram, Haryana

Approved by: All India Council for Technical Education (AICTE), New Delhi

Affiliated to: Gurugram University, Gurugram

## DEPARTMENT OF ELECTRONIC AND COMPUTER ENGINEERING

ACADEMIC YEAR 2023-24

SEMESTER Vth

### Microprocessor (ESC-CSE-301G)

Course Outcome(CO)	Details of Course Outcomes
(CO1)	Understand the operation and architecture of Intel 8085 microprocessor including Instruction Set Architecture, assembly language programming, timing and speed of operation
(CO2)	Learn the operation of circuits for user interaction through switches, keyboard and display devices.
(CO3)	Understand the operation and architecture of Intel 8086 microprocessor including Instruction Set Architecture, assembly language programming, timing and speed of operation.
(CO4)	Understand the motivation and need for peripheral operations circuits for digital data exchange, timer, serial communication, merits of direct memory access, interrupt controller and other circuits.

### Computer Networks (PCC-CSE-303G)

Course Outcome(CO)	Details of Course Outcomes
(CO1)	Explain the functions of the different layer of the OSI Protocol.
(CO2)	Draw the functional block diagram of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) and describe the function of each.
(CO3)	Identify and connect various connecting components of a computer network.
(CO4)	Configure DNS DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW, HTTP, SNMP, Bluetooth, Firewalls using open source available software and tools.

## DIGITAL SIGNAL PROCESSING (PCC-ECE307G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	To get an introduction of basics like Sampling, Interpolation, Aliasing and operations, Convolution and Correlation.
(CO2)	To Study the basics, mathematical analysis and applications of DFT and FFT
(CO3)	To study the design and implementation of Digital Filters.
(CO4)	To impart practical knowledge of signal processing operations in MATLAB.

## Design and Analysis of Algorithms (PCC-CSE-307G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	To identify and justify correctness of algorithms and to analyse running time of algorithms based on asymptotic analysis.
(CO2)	To understand when an algorithmic design situation calls for the divide-and-conquer paradigm. Synthesize divide-and-conquer algorithms.
(CO3)	Describe the greedy paradigm and dynamic-programming paradigm. Explain when an algorithmic design situation calls for it
(CO4)	Developing greedy algorithms/dynamic programming algorithms, and analyze it to determine its computational complexity.
(CO5)	To write the algorithm using Backtracking and Branch and Bound strategy to solve the problems for any given model engineering problem.

## SOFT COMPUTING (PCC-ECSE301G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(CO1)	Identify and describe soft computing techniques and their roles in building intelligent Machines
(CO2)	Apply fuzzy logic and reasoning to handle uncertainty and solve various engineering problems.
(CO3)	Apply genetic algorithms to combinatorial optimization problems.
(CO4)	Evaluate and compare solutions by various soft computing approaches for a given problem.

### **Constitution of India (MC-317G)**

<b>CourseOutcome(CO)</b>	<b>DetailsofCourseOutcomes</b>
<b>(CO1)</b>	Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
<b>(CO2)</b>	Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
<b>(CO3)</b>	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.
<b>(CO4)</b>	Discuss the passage of the Hindu Code Bill of 1956.

### **SOFTWARE ENGINEERING (PEC CSE-311G)**

<b>CourseOutcome(CO)</b>	<b>DetailsofCourseOutcomes</b>
<b>(CO1)</b>	How to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment
<b>(CO2)</b>	An ability to work in one or more significant application domains
<b>(CO3)</b>	Work as an individual and as part of a multidisciplinary team to develop and deliver quality software
<b>(CO4)</b>	Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle
<b>(CO5)</b>	Demonstrate an ability to use the techniques and tools necessary for engineering practice

### **SYSTEM PROGRAMMING AND SYSTEM ADMINISTRATION (PEC CSE-313G)**

<b>CourseOutcome(CO)</b>	<b>DetailsofCourseOutcomes</b>
<b>(CO1)</b>	To understand various file statistics.
<b>(CO2)</b>	To work on wildcards.
<b>(CO3)</b>	To know about shell programming and AWK utility.

## Digital Image Processing (PEC-CSE-315G)

CourseOutcome(CO)	DetailsofCourseOutcomes
(C01)	Know and understand the basics and fundamentals of digital image processing, such as digitization, sampling, quantization, and 2D-transforms.
(C02)	Operate on images using the techniques of smoothing, sharpening and enhancement.
(C03)	Understand the restoration concepts and filtering techniques.
(C04)	Learn the basics of segmentation, features extraction, compression and recognition methods for colour models
(C05)	