

SR. No	Name Of Subject	Integrated Circuits (204187)	
1	Course Objectives:1	To understand characteristics of IC and Op-Amp and identify th	
	Course Objectives:2	To introduce various manufacturing techniques.	
	Course Objectives:3	To study various op-amp parameters and their significance for	
	Course Objectives:4	To learn frequency response, transient response and frequency	
	Course Objectives:5	To analyse and identify linear and nonlinear applications of Op	
	Course Objectives:6	To understand functionalities of PLL and its use in various app	
	Course Outcomes:1	Understand the characteristics of IC and Op-Amp and identify	
	Course Outcomes:2	Understand and identify various manufacturing techniques.	
	Course Outcomes:3	Derive and determine various performances based parameters &	
	Course Outcomes:4	Comply and verify parameters after exciting IC by any stated n	
	Course Outcomes:5	Analyze and identify the closed loop stability considerations an	
	Course Outcomes:6	Analyze and identify linear and nonlinear applications of Op-A	
	Course Outcomes:7	Understand and verify results (levels of V & I) with hardware i	
	Course Outcomes:8	Implement hardwired circuit to test performance and applicatio	
	Course Outcomes:9	Understand and apply the functionalities of PLL to Frequency s	
	Name Of Subject	Control Systems	
2	Course Objectives:1	To introduce the elements of control system and their modellin	
	Course Objectives:2	To introduce methods for analyzing the time response, the freq	
	Course Objectives:3	To introduce the concept of root locus, Bode plots, Nyquist plo	
	Course Objectives:4	To introduce the state variable analysis method.	
	Course Objectives:5	To introduce concepts of PID controllers and digital and contro	
	Course Objectives:6	To introduce concepts programmable logic controller.	
	Course Outcomes:1	Determine and use models of physical systems in forms suitabl	
	Course Outcomes:2	Determine the (absolute) stability of a closed-loop control syste	
	Course Outcomes:3	Perform time domain and frequency domain analysis of control	
	Course Outcomes:4	Perform time domain and frequency domain correlation analysi	
	Course Outcomes:5	Apply root-locus, Frequency Plots technique to analyze control	
	Course Outcomes:6	Express and solve system equations in state variable form.	
		Name Of Subject	Analog Communications (204189)
		Course Objectives:1	Describe and analyze the mathematical techniques of generatio
		Course Objectives:2	Evaluate the performance levels (Signal-to-Noise Ratio) of AM
	Course Objectives:3	Convert analog signals to digital format and describe Pulse and	
	Course Objectives:4		

3	Course Objectives:5	
	Course Outcomes:1	Understand and identify the fundamental concepts and various
	Course Outcomes:2	Explain signal to noise ratio, noise figure and noise temperature
	Course Outcomes:3	Describe analog pulse modulation techniques and digital modulation
	Course Outcomes:4	Develop the ability to compare and contrast the strengths and weaknesses
	Name Of Subject	Object Oriented Programming (204190)
4	Course Objectives:1	Make the students familiar with basic concepts and techniques
	Course Objectives:2	Develop an ability to write programs in C++ and Java for problem solving
	Course Outcomes:1	Describe the principles of object oriented programming
	Course Outcomes:2	Apply the concepts of data encapsulation, inheritance in C++.
	Course Outcomes:3	Understand basic program constructs in Java
	Course Outcomes:4	Apply the concepts of classes, methods and inheritance to write programs
	Course Outcomes:5	Use arrays, vectors and strings concepts and interfaces to write programs
	Name Of Subject	Signals and Systems
5	Course Objectives:1	To understand the mathematical description of continuous and discrete time signals
	Course Objectives:2	To classify signals into different categories.
	Course Objectives:3	To analyse Linear Time Invariant (LTI) systems in time and frequency domain
	Course Objectives:4	To build basics for understanding of courses such as signal processing
	Course Objectives:5	To develop basis of probability and random variables.
	Course Outcomes:1	Understand mathematical description and representation of continuous and discrete time signals
	Course Outcomes:2	2. Develop input output relationship for linear shift invariant systems
	Course Outcomes:3	3. Understand and resolve the signals in frequency domain using Fourier transform
	Course Outcomes:4	4. Understand the limitations of Fourier transform and need for Laplace transform
	Course Outcomes:5	5. Understand the basic concept of probability, random variables and their applications
6	Name Of Subject	Digital Electronics
	Course Objectives:1	To acquaint the students with the fundamental principles of two level digital logic
	Course Objectives:2	To lay the foundation for further studies in areas such as microprocessors and microcontrollers
	Course Outcomes:1	Use the basic logic gates and various reduction techniques of digital logic
	Course Outcomes:2	Design and implement hardware circuit to test performance and timing
	Course Outcomes:3	Understand the architecture and use of microcontrollers for basic applications
	Course Outcomes:4	Design combinational and sequential circuits.

7	Name Of Subject	Electronic Devices & Circuits
	Course Objectives:1	To introduce semiconductor devices FET and MOSFET, their c
	Course Objectives:2	To introduce concepts of both positive and negative feedback in elec
	Course Objectives:3	To analyse and interpret FET and MOSFET circuits for small s
	Course Objectives:4	To simulate electronics circuits using computer simulation software a
	Course Objectives:5	To study the different types of voltage regulators.
	Course Outcomes:1	Comply and verify parameters after exciting devices by any sta
	Course Outcomes:2	Implement circuit and test the performance.
	Course Outcomes:3	Analyze small signal model of FET and MOSFET.
	Course Outcomes:4	Explain behavior of FET at low frequency.
	Course Outcomes:5	Design an adjustable voltage regulator circuits.
8	Name Of Subject	Electrical Circuits and Machines
	Course Objectives:1	To analyse AC and DC networks with network simplification t
	Course Objectives:2	To gain basic knowledge of transformers and their types.
	Course Objectives:3	To conduct experimental procedures on different types of elect
	Course Objectives:4	To understand the constructional details, characteristics, feature
	Course Outcomes:1	Analyze basic AC & DC circuit for voltage, current and power
	Course Outcomes:2	Explain the working principle of different electrical machines
	Course Outcomes:3	Select proper electrical motor for given application.
Course Outcomes:4	Design and analyze transformers.	
	Name Of Subject	Data Structures and Algorithms
9	Course Objectives:1	To assess how the choice of data structures and algorithm desig
	Course Objectives:2	To choose the appropriate data structure and algorithm design i
	Course Objectives:3	To study the systematic way of solving problems, various meth
	Course Objectives:4	To solve problems using data structures such as linear lists, sta
	Course Objectives:5	To employ the different data structures to find the solutions for
	Course Outcomes:1	Discuss the computational efficiency of the principal algorithm
	Course Outcomes:2	Write and understand the programs that use arrays & pointers i
	Course Outcomes:3	Describe how arrays, records, linked structures are represented
	Course Outcomes:4	Implement stacks & queues for various applications.
	Course Outcomes:5	Understand various terminologies and traversals of trees and us
	Course Outcomes:6	Understand various terminologies and traversals of graphs and
	Name Of Subject	EMIT

10	Course Objectives:1	To make student competent for handling measuring instruments and different conditions.
	Course Outcomes:1	Understand fundamental of various electrical measurements.
	Course Outcomes:2	Understand and describe specifications, features and capabilities of e
	Course Outcomes:3	Finalize the specifications of instrument and select an appropriate ins
	Course Outcomes:4	Carry out required measurement using various instruments under dif
	Course Outcomes:5	Able to compare measuring instruments for performance parameters
	Course Outcomes:6	Select appropriate instrument for the measurement of electrical para

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