SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ACADAMIC YEAR-2021-22

COURSE OUTCOMES SUMMARY

II/II (R20)

	Electronic Circuit Analysis (C221)	
C221.1	Analyze the amplifier circuits using small signal high frequency model	Analyze
C221.2	**A**nalyze the different types of the coupled amplifiers and their performance characteristics	Analyze
C221.3	Describe and analyze the different types of feedback amplifiers.	Analyze
C221.4	Analyze and Design oscillator Circuits.	Create
C221.5	**A**nalyze different types of power amplifiers and compare them in terms of efficiency and also Analyze the effects of cascading on single, double tuned amplifiers on bandwidth and their stability.	Analyze
	DICD(222)	
C222.1	Understand the structure of commercially available digital integrated circuit families.	Understand
C222.2	Learn the IEEE Standard 1076 Hardware Description Language (VHDL).	Understand
C222.3	Model complex digital systems at several levels of abstractions, behavioral, structural, and rapid system prototyping	Create
C222.4	Analyze and design basic digital circuits with combinatorial logic circuits using VHDL.	Analyze
C222.5	Analyze and design basic digital circuits with sequential logic circuits using VHDL.	Analyze
	Analog Communications (C223)	
C223.1	Explain the basic concepts of Analog Communication	Understand
C223.2	Explain the analog communcation systems using amplitude modulaton and demodulation	Understand
C223.3	Explain the analog communication systems using angle modulation and demodulation	Understand
C223.4	Evaluate the performance of fundamental blocks constituting various analog modulation techniques	Evaluate
C223.5	Analyze the impact of noise in various analog communication systems	Analyze
	Linear Control Systems (C224)	
C224.1	Understand the concepts of feedback and its advantages to various control systems	Understand
C224.2	Discuss the characteristics of the given system in terms of the transfer function	Apply
C224.3	Analyze the system in terms of absolute stability and relative stability by different approaches	Analyze
C224.4	Analyse the frequency response by applying the performance metrics to design the control system .	Analyze
C224.5	Design different control systems as per given specifications and also the concepts of controllability and observability	Evaluate
	Management and Organizational Behavior (C225)	

C225.1	Explain the concept and functions of management, system approach to management	Understand
C225.2	Explain the concept of HRM and Marketing Management	Understand
C225.3	Define the concept of strategic management, generic alternate strategies	Remember
C225.4	Describe the concept of impression management and theories of motivation	Remember
C225.5	Explain the concept of Group behaviour and strategies of stress	Understand

III-II(R19)

VLSI Design (C322)		
C322.1	Demonstrate the Fabrication of IC and Calculate compute electrical properties of MOS Circuits.	Apply
C322.2	Design various gates, adders, Multipliers and Memories using stick diagrams, Layouts and apply design rules to get Layout of IC	Create
C322.3	Design the digital circuits by applying the basic circuit concepts such as sheet resistance, delay, area of capacitance.	Create
C322.4	Design the Subsystems with CMOS Technology for various static CMOS Combinational and Sequential logic circuits at the transistor level including mask layout	Create
C322.5	Design the digital circuits by using the techniques of ASIC and FPGA design flow.	Create
C322.6	Demonstrate VHDL synthesis, simulation, design captures tools, design verification tools and build a Boolean function using FPGA IC	Create
Digital Signal Processing(C323)		
C323.1	Interpret, represent and process discrete/digital signals & systems and Discuss the properties of LTI systems in terms of z-transforms	Understand
C323.2	Compute and analyze signal spectra using DFT/FFT algorithms.	Analyze
C323.3	Design IIR filters to suit specific requirements for specific applications and basic structures of IIR Systems.	Create
C323.4	Design FIR filters to suit specific requirements for specific applications and basic structures of FIR Systems.	Create
C323.5	Design multi rate digital signal processing of signals through system	Create
C323.6	Discuss the architecture of a digital signal processor and some programming issues in floating-point digital signal processor	Understand
DICD(324)		
C324.1	Understand the concepts ofMOSDesign	Understand
C324.2	Design and analysis of Combinational MOS Circuits	Create
C324.3	Design and analysis of Sequential MOS Circuits	Create
C324.4	Extend the Digital IC Design to Different Applications	Apply
C324.5	Understand the Concepts of Semiconductor Memories, Flash Memory, RAM array organization	Understand

DM (C325)		
C325.1	Summarize the architecture of data warehouse and Similarity, Dissimilarity measures for any given raw data.	Understand
C325.2	Apply different Preprocessing Techniques	Apply
C325.3	Construct a decision tree and solve the problem of classification.	Apply
C325.4	Compare Apriori and FP-growth association rule mining algorithms for frequent item set generation.	Analyze
C325.5	Apply suitable clustering algorithm for the given data set.	Apply
IOT(C326)		
C326.1	Understand internet of Things and its hardware and software components.	Understand
C326.2	To learn and understand elements of IOT system.	Understand
C326.3	Demonstrate the communication protocol used to connect the various connecting devices & Explain Internet connectivity principles & Application layer protocols.	Apply
C326.4	Identify the data acquisition, storage and business models used in IOT.	Understand
C326.5	Design real time IOT based applications.	Create

IV-II (R16)

Cellular Mobile Communications (C421)		
C421.1	Analyze cellular mobile radio systems.	Analyze
C421.2	Analyze various types of Interferences and cell traffic in Mobile communication system	Analyze
C421.3	Design of various types of Antennas for Mobile communication systems.	Design
C421.4	Analyse & Design channel assignment for various mobile applications.	Design
C421.5	Analyse types of Handoffs & Dropped calls in mobile communication system.	Analyze
C421.6	Analyze types of digital cellular networks	Analyze
Electronic Measurements and Instrumentation (C422)		
C422.1	Discuss the structure of different analog instruments and its characteristics	Understand
C422.2	Analyze different signal generators and its working	Analyze
C422.3	Illustrate different CRO's and its working, applications	Analyze
C422.4	Measure different parameters using bridges and its applications.	Evaluate
C422.5	Analyze different transducers and its working, applications.	Analyze
C422.6	Evaluate the different Physical Parameters of different transducers.	Evaluate
Course Name: Satellite Communications (C423)		
C423.1	Describe about History of satellite communications and its importance	Understand
C423.2	Summarize different types of satellites with orbital mechanics and launching methods	Understand
C423.3	Demonstrate satellite subsystems	Apply

C423.4	Calculate and evaluate the link power budget in satellites Rank and justify various multiple accessing techniques	Evaluate
C423.5	Analyze the need of earth station and choose the type of antenna	Analyze
C423.6	Demonstrate the impacts of GPS, and Navigation design for tracking and launching of satellite	Apply
Wireless sensors & Networks (C424A)		
C424A.1	Understand the basics , applications and architectures of Wireless sensor networks	Understand
C424A.2	Understand the various types of network technologies	Understand
C424A.3	Understand the various types of MAC protocols	Understand
C424A.4	Understand the concept of routing protocols for ADHOC wireless networks	Understand
C424A.5	Understand the concepts of transport layer and security protocols	Understand
C424A.6	Understand the security, sensor network platform and tools and applications of wireless sensor networks	Understand
Seminar(C425)		
C425.1	Identify recent technical topics from interested domains.	
C425.2	Analyze the applicability of modern software tools and technology.	
C425.3	Develop Presentation and Communication skills.	
C425.4	Develop Technical report preparation skills.	
Project(C426)		
C426.1	Describe the abstract of the project	
C426.2	Collect the information about various existing conservatory management systems and smart grids.	
C426.3	Identify the time duration and cost required to develop the project	
C426.4	Implement and test the project which is useful to the society	
C426.5	Describe the summary of the project and identify the impact of the project in the society	
C426.6	Demonstrate the project individual and in a group	

HOD