

CO. No. C228.1

C228.2

C228.3

Develop python programs using library modules

Able to implement python programs using pandas

Develop python programs using Matplotlin Module

LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE OUTCOME (Academic Year: 2023-2024 Even Sem)

					COURS	SE OUTCOME(CO's)
Name of the Course	:Analog Communica	ions Year:	II-IV	Sem A Y	: 2023-24	
CO. No. C221.1			1.1.6	1.1		Outcome
C221.1	Analyze and des Compare and an				ion analo	og systems
C221.3	Explain the ang					
C221.4	<u> </u>		and demodula	ation technic	ques	
C221.4	Design AM & F		- (CNID)		i A	and a Communication material & Analysis and design the majors Dullar Madulation Contains
.221.3	Evaluate Signal	to Noise Ratio	b (SNR) perio	ormance of v	arious A	nalog Communication systems & Analyze and design the various Pulse Modulation Systems
Name of the Cour	rse:Pulse and Line	ar Integrated	l Circuits	Year: II-	IV	Sem A.Y: 2023-24
CO. No.						Outcome
C222.1	Construct differ	ent linear netw	vorks and ana	lyse their res	sponse to	o different input signals
222.2	Analyse and De				-	
C222.3						rential Amplifier
		•	•	•		*
C222.4	<u> </u>				and simp	ple filter circuits
C222.5	Design and Ana	lyse A/D and	D/A convertor	rs		
Name of the Cour	rse: Electronic Cir	cuit Analysis	Year: I	I-IV	Se	em A.Y: 2023-24
CO. No.						Outcome
			ency, mid fre	quency and	high free	quency response of small signal Single stage and Multistage RC coupled and Transformer
C223.1	amplifiers using					
C223.2	Identify the type	of negative f	eedback and t	o analyse th	e design	of negative feedback amplifiers.
C223.3	To evaluate freq	uency of Osci	llations of Ro	C and LC os	cillators.	
C223.4	Distinguish bety	veen the class	es of Power A	mplifiers an	d to com	pare their efficiency.
C223.5	Compare the per			-		
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Name of the Cour	rse: Digital System	Design	Vear: ILIV		Sem A	V· 2023_24
	rse: Digital System	Design	Year: II-IV		Sem A	N.Y: 2023-24
CO. No.				• 1		Outcome
CO. No. C224.1	Interpret Boolea	n algebra to n	ninimize the le	- 1		
CO. No. C224.1 C224.2	Interpret Boolea Design combina	n algebra to n	ninimize the lo	lux	ssions an	Outcome
CO. No. C224.1 C224.2	Interpret Boolea	n algebra to n	ninimize the lo	lux	ssions an	Outcome
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G220.4	War and a second									
C228.4	Write, Test, Debug python library modules.									
C228.5	Debug python image programs using various modules									
Name 64 C	Date Communication and Naturalism Verm III VI									
Name of the Cour	rse: Data Communications and Networks Year: III-VI Sem A.Y: 2023-24	_								
CO. No.	Outcome									
C321.1	Illustrate network topologies like star, bus & ring, and concepts of circuit & Packet switching									
C321.2	Comprehend the role of data link layer and significance of mac protocols									
C321.3	Compare network and internet protocols									
C321.4	Interpret transport layer working with TCP/IP ,UDP and ATM layer									
C321.5	Comprehend the functionality of application layer and importance of network security									
Name of the Cour	rse: Antennas and wave propagation Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome									
C322.1	Characterize the basic principles of antennas and interpret the antenna terminology.									
C322.1										
C322.2 C322.3	Apply the design considerations of different types of wire antennas and its usage in understanding practical antennas.									
	Analyze the non-resonant antennas for various ranges of frequencies and get updated with latest developments in the smart antennas									
C322.4	Apply the principles and design considerations of antennas as well as antenna arrays, measure the standard antenna parameters.									
C322.5	Interpret the various modes of radio wave propagation used for different applications.									
Name of the Cour	rse: VLSI Design Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome									
C323.1	Demonstrate the fabrication process of Integrated circuits and basic electrical properties of MOS transistors.									
C323.2	Illustrate the layout of any logic circuit which helps to understand and estimate parasitic effect of any logic circuit.									
		1								
C323.3	Implement logic gates and other complex gates using gate level design and understand the concept of wiring capacitance, fan-in and fan-out.	-								
C323.4	Demonstrate building blocks of data path systems using different combinational circuit elements.									
C323.5	Describe the concept of CMOS testing and design approach of different programmable logic devices.									
	rse: Digital Signal Processing Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome									
C324.1	Evaluate Discrete Fourier transform and fast Fourier transform algorithms									
C324.2	Design digital FIR filters using windowing techniques									
C324.3	Design digital IIR filters using various techniques									
C324.4	Demonstrate the impact of finite word leng effect in filters and use of multirate signal processing									
C324.5	Describe the fundamental features of advanced DSP processors									
Name of the Cour	rse: PE-II: Fundamentals of IOT Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome									
C325.1	Analyze the IoT technology and research directions.									
C325.2	Comprehend various protocols and architecture of IoT									
C325.3	Design simple IoT systems with IoT reference model									
C325.4	Analyze with the various applications of IoT									
C325.5	Comprehend the different privacy and security approaches at IoT.									
		_								
Name of the Cour	rse: Digital Signal Processing Lab Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome									
C326.1	Illustrate various signal processing algorithms									
C326.2	Analyse FIR with specific magnitude and phase requirements	1								
C326.3	Analyse IIR with specific magnitude and phase requirements									
C326.4	Illustrate basics of multi rate signal processing	1								
C326.5	Analyse Digital filters on DSP processor	1								
0520.5	. maryor original and on both processor.									
Name of the Com	rse: VLSI & ECAD Lab Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome	1								
C327.1	Demonstrate Verilog code simulation for logic gates and complex logic gates using vivado.	1								
C327.1 C327.2	Illustrate Verilog code simulation for logic gates and complex logic gates using vivado. Illustrate Verilog code simulation for combinational circuits using switch level, gate level, data flow and behavioral modeling.	+								
		-								
C327.3	Design test bench code for sequential circuits using switch level, gate level, data flow and behavioral modeling.	-								
C327.4	Design the FPGA implementation of Finite State Machine and generate the synthesis report.	1								
C327.5	Implement the layouts of basic logic gates using Micro wind.									
	rse: Computer Appplications Lab Year: III-VI Sem A.Y: 2023-24	_								
CO. No.	Outcome									
C328.1	Familiarize with the usage of IDE tools and programming									
C328.2	Implement use various on chip like LCD, Temperature sensor, Buzzer using LC2148									
C328.3	Analyze the devices like Stepper Motor by interfacing them to ARMP processor									
C328.4	Design the digital logic circuits in various modeling styles using Verilog HDL									
C328.5	Implement basic gates at transistor level									
Name of the Cour	rse: Mini Project Year: III-VI Sem A.Y: 2023-24									
CO. No.	Outcome	1								
C329.1	Formulate a specific problem and give solution									
C329.2	Develop model/models either theoretical/practical/numerical form	1								
C329.3	Solve, interpret/correlate the results and discussions									
C327.3	porte, interpresentation in testino and discussions									

C329.4	Conclude the results obtained								
C329.5	Write the documentation in standar	d format							
C329.3	write the documentation in standar	d format							
Name of the C	Course: Wireless Sensor Networks	Year: IV-VIII	Sem A.Y: 2023-24						
CO. No.	Source Whereas Sensor Networks	10001111111	Outcome						
C421.1	Illustrate deployment strategies, cha	allenges and technolo							
C421.2	Describe the network architecture wireless sensor notwork.								
C421.3	Describe the network architecture whereas sensor notwork. Describe the communication, energy efficiency computing, storage and transmission.								
C421.4	Establish the infrastructure and simulation								
C421.5	Demonstrate the concept of security, and attacks in WSN and Introduction to 5G								
0.110		, ,							
	Course: Global Navigational Satellite Sy	ourse: Global Navigational Satellite Systems Year: IV-VIII Sem A.Y: 2023-24							
CO. No.			Outcome						
C422.1	Define the fundamentals of GPS								
C422.2	Describe the different types of GNSS Signals and GNSS Datum.								
C422.3	Analyze the GPS errors and their modeling techniques.								
C422.4	Explain various GPS data processing and GPS integration techniques.								
C422.5	Discuss the augmentation systems a	Discuss the augmentation systems and regional navigation satellite systems							
	Course: Smart Building Systems Ye	ear: IV-VIII	Sem A.Y: 2023-24						
CO. No.	Outcome								
C423.1	Describe the basic blocks and systems for building automation								
C423.2	Apply the concept of fire alarm systems in Smart building								
C423.3	Use different subsystems for building automation and integrate them								
C423.4	Anaylze the building automation								
C423.5	Design different systems for building automation and integrate those systems								
	Course: Project Work Phase -II Yea	r: IV-VIII	Sem A.Y: 2023-24						
CO. No.			Outcome						
C424.1	Demonstrate the ability to synthesize and apply the knowledge and skills acquired in the academic program to the real-world problems.								
C424.2	Evaluate different solutions based on economic and technical feasibility.								
C424.3	Effectively plan a project and confidently perform all aspects of project management								
C424.4	Demonstrate effective written and oral communication skills.								
C424.5	Find relevant sources (e.g., library, Internet, experts) and gathers information for preparing reports and other relevant documentation.								