

# LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY Department of Information Technology

Semester: III (A)

### **Course Outcomes**

**Academic Year – 2023-2024** 

Student will be able to

CO. No.	Description					
CO. 110.						
	Course Outcomes: C31- English For Technical Communication(U21EN301)					
C31.1	Apply technical communication skills effectively					
C31.2	Adapt different types of official correspondence					
C31.3	Construct report writing using various techniques					
C31.4	Develop adequate skills of manual writing					
C31.5	Interpret the information transfer from verbal to non-verbal data and vice-versa					
CO. No.	Description					
	Course Outcomes: C32 – Digital Logic Design(U21EC305)					
C32.1	Demonstrate the number system conversions and simplify Boolean functions					
C32.2	Analyze and simplify Boolean expressions using Karnaugh-maps and tabulation method.					
C32.3	Design and analyze combinational circuits.					
C32.4	Design Sequential circuits.					
C32.5	Design and Analyze Counters and Finite State Machines					
CO. No.	Description					
C	ourse Outcomes: C33 – Mathematics-III (Probability and Statistics)(U21MA301)					
C33.1	Determine Probability, Random variables, distributions and its application					
C33.2	Apply the knowledge of standard discrete probability distributions and Moments					
C33.3	Calculate parameters of standard continuous probability distributions.					
C33.4	Find the parameters and concepts of correlation, regression and obtain the knowledge of sampling Theory with context to test of hypothesis					
C33.5	Analyze and check the validity of statement using testing of hypothesis for parameters and goodness of fit.					
CO. No.	Description					
	Course Outcomes: C34 – Data Structures(U21CS302)					
C34.1	Classify data structures & algorithms and work with performance analysis.					
C34.2	Develop stack and Queue ADT and work on their applications.					
C34.3	Work with SLL and DLL and implement real world applications.					
C34.4	Analyze and implement Searching, Sorting and Hashing Techniques.					
C34.5	Create non-linear data structures and analyze traversal techniques of trees and graphs					

CO. No.	Description					
	Course Outcomes: C35 – Python Programming(U21CM301)					
C35.1 Dev	Develop essential programming skills in python programming concepts.					
C35.2 App	Apply the knowledge of standard python data structures for a given problem.					
prog	Write a code related to the fundamental notions and techniques used in object-oriented programming					
C35.4 De	evelop the application to perform Database access and Transaction Handling.					
C35.5 Perf	Form data Analysis using Numpy and Pandas library modules.					
CO. No.	Description					
Cours	se Outcomes: C36 – Advanced Communication Skills Lab(U21EN3L1)					
C36.1 Org	anize ideas relevantly and coherently in their communication					
C36.2 Ana	llyze and comprehend the text inferentially					
C36.3 Wri	te Resume/CV and Cover letter effectively					
C36.4 Prac	ctice oral presentation confidently					
C36.5 Part	icipate in group discussions dynamically and face interviews optimistically					
CO. No.	Description					
	Course Outcomes: C37 – MATLAB(U21EC3L4)					
wri	arn features of Mat lab as a programming language, its use as a simulation tool, and ite simple programs to solve Scientific, Mathematics, and Engineering problems.					
	nerate Scripts and functions, and interactive computations in Mat lab development vironment.					
C37.3 Per	Perform and Compute different operations using MAT Lab.					
C37.4 Use	Use basic flow control functions efficiently.					
C37.5 Cre	Create 2D and 3D plotting functions.					
CO. No.	Description					
•	Course Outcomes: C38 – Data Structures Lab(U21CS3L1)					
C38.1 Imp	lement the linear data structures using arrays and linked lists.					
C38.2 Imp	lement the applications of Stacks.					
C38.3 Wri	te code to create Binary Search Trees, AVL Trees and perform standard operations.					
_	lement searching, sorting and hashing techniques and apply appropriate techniques solving a given Problem					
C38.5 Imp	lement Tree and Graph Traversal Algorithms.					
CO. No.	Description					
	Course Outcomes: C39 – Python Programming Lab(U21CM3L1)					
C39.1 Sun	nmarize the fundamental concepts of python programming.					
C39.2 Out	line the control statements and functions by writing python program.					
C39.3 Den	Demonstrate Exception Handling, File Handling Operations and Packages					
C39.4 Inte	rpret Object Oriented Programming in Python					
	ipiet Object Oriented Frogramming in Fython					



## LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY Department of Information Technology

Semester: V (A)

#### **Course Outcomes**

**Academic Year - 2023-2024** 

Student will be able to

CO. No. **Description** Course Outcomes: C51 – Business Economics and Financial Analysis (U21MB501) Apply the concepts of business and economics during his professional and personal C51.1 C51.2 Describe the elasticity of the demand of the product, different types, and measurement of elasticity of demand and factors influencing on elasticity of Recognize the Production function, features of Iso-Quants and Iso-Costs, different C51.3 types of internal economies, external economies and law of returns with appropriate examples. C51.4 Prepare the financial statements of the firm. C51.5 Analyze the financial statements using ratio analysis and cash flow techniques. CO. No. **Description** Course Outcomes: C5-Automata Theory, Languages & Computation (U21CM501) C52.1 Design and use of Finite Automata and establish the correspondence with it's language C52.2 Analyze Regular Expressions and Prove a given language is regular or otherwise. Understand Closure and Decision Properties of Regular Languages C52.3 Develop Context Free Grammars, Design Pushdown Automata and establish equivalence of language of PDA and CFG Convert the given CFG into CNF and GNF and understand the properties of Context Free C52.4 Languages C52.5 Design Turing Machine and illustrate its working and analyze the Undecidable problems C52.6 Design and use of Finite Automata and establish the correspondence with it's language CO. No. **Description** Course Outcomes: C53 – Design & Analysis of Algorithms(U21CS501) C53.1 Use asymptotic notations for basic efficiency classes. C53.2 Solve problems using various techniques like divide-and-conquer and transfer-and-conquer. C53.3 Use TSP and Floyd's algorithms to solve real world problems. C53.4 Analyze the Pattern Matching Algorithms and distinguish P and NP Problems C53.5 Apply Backtracking and Dynamic Programming approaches for real world problems

CO. No.	Description					
	Course Outcomes: C54 – Software Engineering(U21IT501)					
C54.1	Describe software development processes and their usability in problem domains.					
C54.2	Explain the process of requirements collection, analyzing, and modeling requirements for effective understanding and communication with stake holders.					
C54.3	Design and develop the architecture of real world problems towards developing a blue print for implementation.					
C54.4	Apply the concepts of software quality, testing and maintenance.					
C54.5	Demonstrate the concepts related to Risk management and Software project Estimation					
CO. No.	Description					
(	Course Outcomes: C55 – Disaster Preparedness and Management (U21CE509)					
C55.1	Explain the terms and concepts related to Disaster Management					
C55.2	Describe the various categories of disasters and its specific characteristics					
C55.3	Explain the pre disaster, during disaster and post disaster measures and Frameworks					
C55.4	Describe the factors affecting vulnerabilities, embarkments, climate changes adaption.					
C55.5	Explore various technological applications to aid disaster Management					
CO. No.	Description					
	Course Outcomes: C56 – Software Engineering Lab(U21IT5L1)					
C56.1	Translate end-user requirements into system and software requirements					
C56.2	Generate a high-level design of the system from the software requirements					
C56.3	Identify the risks associated with the software developed.					
C56.4	Design the test case to test the software developed.					
C56.5	Test the newly designed System and generate the Testing Report.					
CO. No.	Description					
	Course Outcomes:C57 – Scripting Languages Lab(U21IT5L2)					
C57.1	Design and develop web Applications using HTML, CSS, XML, JavaScript, PHP, SERVLETS, JSP and protocols.					
C57.2	Design and implement dynamic websites with good aesthetic sense of designing					
C57.3	Create web pages using HTML and Cascading Styles sheets					
C57.4	Analyze a web page and identify its elements and attributes.					
C57.5	Develop JSP applications implementing Session management and Data base Connectivity					

CO. No.	Description				
Course Outcomes:C58– Internship(U21IT5P1)					
C58.1	Design and develop a small and simple product in hardware or software.				
C58.2	Complete the task or realize a pre specified target, with a specified scope.				
C58.3	Identify and evaluate the alternate viable solutions for a given problem with reference to the specified criteria.				
C58.4	Gain knowledge of working practices within industrial / R&D environments.				
C58.5	Implement the selected solution and document the same				
CO. No.	Description				
	Course Outcomes: C59- Aptitude and Reasoning(U21MA5L1)				
C59.1	Build proficiency in quantitative reasoning.				
C59.2	Improve critical thinking skills.				
C59.3	Enhance analytical skills.				
C59.4	Demonstrate quantitative aptitude concepts.				
C59.5	Adapt principles of quantitative aptitude to achieve qualitative results				



# LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY Department of Information Technology

Semester: VII (OU)

### **Course Outcomes**

Academic Year – 2023-2024 Student will be able to

CO. No.	Description					
	Course Outcomes: C71- Internet of things(PC701IT)					
C71.1	Demonstrate the basic principles as well as the core concepts related to the internet of things					
C71.2	Analyze the core architectural concepts to meet the challenges in implementing the connected devices.					
C71.3	Identify different types of sensors and programming aspects for the domain-specific IOT.					
C71.4	Differentiate between the Network layer protocols and Applications layer protocols.					
C71.5	Design an IOT network and push the real-time data to the cloud server.					
CO. No.	Description					
	Course Outcomes: C72 – Big data analytics(PC702IT)					
C72.1	Demonstrate big data and use cases from selected business domains.					
C72.2	Apply the knowledge of NoSQL big data management and experiment with Install, configure, and run Hadoop and HDFS.					
C72.3	Apply the concept of Casandra and MongoDB with the procedural approach.					
C72.4	Analyse map-reduce analytics using Hadoop					
C72.5	Adapt Hadoop related tools such as HBase, Cassandra, Pig, and Hive for big data Analytics.					
CO. No.	Description					
	Course Outcomes: C73 – Cyber security(PE732IT)					
	Define and Analyze different cyber security related issues, cybercrimes, cyber stalking and					
C73.1	Describe legal frameworks to handle cybercrimes					
C73.1						
	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of					
C73.2	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context					
C73.2 C73.3	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents					
C73.2 C73.3 C73.4	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization					
C73.2 C73.3 C73.4 C73.5	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization  Demonstrate social computing, privacy protection, & internet guidelines for organizations					
C73.2 C73.3 C73.4 C73.5	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization  Demonstrate social computing, privacy protection, & internet guidelines for organizations  Description  Course Outcomes: C74a—Blockchain Technologies(PE743IT)  Demonstrate the ability to compare and contrast distributed database and Blockchain.					
C73.2 C73.3 C73.4 C73.5 CO. No.	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization  Demonstrate social computing, privacy protection, & internet guidelines for organizations  Description  Course Outcomes: C74a—Blockchain Technologies(PE743IT)  Demonstrate the ability to compare and contrast distributed database and Blockchain.  Evaluate Nakamoto consensus and proof of work's impact, and consolidate insights into Bitcoin's decentralized architecture, fostering a nuanced comprehension of its resilience					
C73.2 C73.3 C73.4 C73.5 CO. No.	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization  Demonstrate social computing, privacy protection, & internet guidelines for organizations  Description  Course Outcomes: C74a- Blockchain Technologies(PE743IT)  Demonstrate the ability to compare and contrast distributed database and Blockchain.  Evaluate Nakamoto consensus and proof of work's impact, and consolidate insights into Bitcoin's decentralized architecture, fostering a nuanced comprehension of its resilience and security.  Explain and experiment with the design principles and mechanism, of Bitcoin and					
C73.2 C73.3 C73.4 C73.5 CO. No. C74a.1 C74a.2	Describe legal frameworks to handle cybercrimes  Identify functioning of different kinds of malwares used in cybercrimes and usage of modern tools and types of cyber-attacks.  Examine the legal perspectives of cybercrimes in Indian and international context  Interpret the commercial activities in the event of significant information security incidents in the Organization  Demonstrate social computing, privacy protection, & internet guidelines for organizations  Description  Course Outcomes: C74a—Blockchain Technologies(PE743IT)  Demonstrate the ability to compare and contrast distributed database and Blockchain.  Evaluate Nakamoto consensus and proof of work's impact, and consolidate insights into Bitcoin's decentralized architecture, fostering a nuanced comprehension of its resilience and security.					

CO. No.	Description					
	Course Outcomes: C74b – Deep Learning(PE744IT)					
C74b.1	Demonstrate connection of deep learning with Machine learning.					
C74b.2	Remember the various concepts related to Neural Networks.					
C74b.3	Analyze the Deep Neural Network techniques					
C74b.4	Create different parameters for Regularization for Deep Learning.					
C74b.5	Apply optimized strategies for training deep models, and analyze the concepts of neural networks to effectively implement and evaluate both linear and non-linear activation functions					
CO. No.	Description					
	Course Outcomes: C75 – Entrepreneurship(OE701ME)					
C75.1	Describe the Indian Industrial Environment, Entrepreneurship and Economic growth, small-and large scale industries, Types and forms of enterprises					
C75.2	Identify the characteristics of entrepreneurs, Emergence of first generation eneterpreneurs, Conception and Evaluation of ideas and their sources					
C75.3	Practice the principles of project formulation, Analysis of market demand, Financial and profitability analysis and technical analysis					
C75.4	Apply the concepts of Project management during construction phase, project organization, Project planning and control using CPM, PERT techniques					
C75.5	Differentiate the behavioral aspects of entrepreneurs, Time management, Various approaches of time management, their strengths and weakness, The urgency addiction and time management matrix.					
CO. No.	Description					
	Course Outcomes: C76 – Internet Of Things Lab(PC751IT)					
C76.1	Use microcontroller based embedded platforms in IOT.					
C76.2	Interface wireless peripherals for exchange of data.					
C76.3	Make use of cloud platform to upload and analyze any sensor data.					
C76.4	Use of Devices, Gateways and Data Management in IOT.					
C76.5	Use the knowledge and skills acquired during the course to build and test a complete, working IOT system involving prototyping, programming and data analysis.					
CO. No.	Description					
	Course Outcomes: C77 – Project Work-1(PW752IT)					
C77.1	Demonstrate the ability to synthesize and apply the knowledge and skills acquired in the academic program to the real-world problems.					
C77.2	Evaluate different solutions based on economic and technical feasibility					
C77.3	Effectively plan a project and confidently perform all aspects of project management					
C77.4 C77.5	Demonstrate effective written and oral communication skills  Property the decommentation report and perform the presentation of the present years.					
	Prepare the documentation report and perform the presentation of the project work					
CO. No.	Description					
C70.1	Course Outcomes: C78 – Summer Internship(SI651IT)					
C78.1	Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.					
C78.2	Determine the challenges and future potential for his / her internship organization in particular and the sector in general.					
C78.3	Test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.					
C78.4	Analyze the functioning of internship organization and recommend changes for improvement in processes					
C78.5	Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.					