



Course Outcomes

Academic Year – 2022-2023

Semester: III (A)

Student will be able to

CO. No.	Description
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	Analyze and Design various combinational circuits
C32.4	Understanding of various Sequential circuits
C32.5	Analyze and Design of counters and understanding FSM.
CO. No.	Description
Course Outcomes: C33 – Mathematics-III(Probability and Statistics) (U21MA301)	
C33.1	Determine Probability, Random variables, distributions and its application
C33.2	Apply the knowledge of some 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 various parameters and goodness of fit.
CO. No.	Description
Course Outcomes: C34 – Data Structures (U21CS302)	
C34.1	Implement various data structures using arrays, linked lists
C34.2	Develop ADT necessary for solving problems based on Stacks and Queues
C34.3	Implement binary trees, general tree structures, advanced search trees, heaps, Graphs
C34.4	Implement hash functions and handle collisions
C34.5	Implement various kinds of sorting techniques and apply appropriate techniques for solving a given problem

CO. No.	Description
Course Outcomes: C35 – Python Programming (U21CM301)	
C35.1	Develop essential programming skills in computer programming concepts like data types, containers.
C35.2	Apply the basics of programming in the Python language.
C35.3	Solve coding tasks related conditional execution, loops.
C35.4	Acquire coding tasks related to the fundamental notions and techniques used in object oriented programming
C35.5	Write basic programs related to basic library modules.
CO. No.	Description
Course Outcomes: C36 – Advanced Communication Skills Lab (U21EN3L1)	
C36.1	Organize ideas relevantly and coherently in their communication
C36.2	Analyze and Comprehend the text inferentially
C36.3	Write Resume/CV and Cover letter effectively
C36.4	Practice oral presentation confidently
C36.5	Participate in group discussions dynamically and face interviews optimistically
CO. No.	Description
Course Outcomes: C37 - Matlab (U21EC3L4)	
C37.1	Learn features of Mat lab as a programming language, its use as a simulation tool, and write simple programs to solve Scientific, Mathematics, and Engineering problems.
C37.2	Generate Scripts and functions, and interactive computations in Mat lab development environment.
C37.3	Perform and Compute different operations using Matlab.
C37.4	Use basic flow control functions efficiently.
C37.5	Create 2D and 3D plotting functions.
CO. No.	Description
Course Outcomes: C38 – Data Structures Lab (U21CS3L1)	
C38.1	Write programs in various data structures using arrays and linked lists.
C38.2	Develop ADT necessary for solving problems based on Stacks and Queues
C38.3	Evaluate binary trees, general tree structures, advanced search trees, heaps, Graphs
C38.4	Apply hash functions and handle collisions
C38.5	Implement various kinds of sorting techniques and apply appropriate techniques for solving given Problem
CO. No.	Description
Course Outcomes: C39 – Python Programming Lab (U21CM3L1)	
C39.1	Summarize the fundamental concepts of python programming.
C39.2	Outline the control statements and functions by writing python program.
C39.3	Demonstrate file handling operations and packages
C39.4	Interpret object oriented programming in python
C39.5	Apply the suitable libraries to solve simple problems



Course Outcomes

Academic Year – 2022-2023

Semester: V (OU)

Student will be able to

CO. No.	Description
Course Outcomes:C51 – Automata Theory (PC 501 IT)	
C51.1	Design and use Of Finite Automata and establish the correspondence with its language
C51.2	Analyze Regular Expressions and Prove a given language is regular or Otherwise
C51.3	Use Closure and Decision Properties of Regular Language.
C51.4	Analyze ambiguity, Develop Context Free Grammars, Parse Trees and establish Context Free Language.
C51.5	Design Pushdown Automata and establish equivalence of language of PDA and CFG
C51.6	Design Turing Machine and illustrate its working and analyze the Undecidable problems
CO. No.	Description
Course Outcomes:C52 – Operating Systems (PC 502 IT)	
C52.1	Explain the fundamental concepts and functions of operating System.
C52.2	Understand process scheduling in a multi-programming environment and implementing process scheduling algorithms.
C52.3	Write application and system calls related programs for managing processes, memory, I/O and inter-process Communication related system Calls
C52.4	Understand memory management, disk management techniques, including virtual memory and file system structure.
C52.5	Explain protection and security related issues of the computer system.
CO. No.	Description
Course Outcomes: C53 – Artificial Intelligence(PC 503 IT)	
C53.1	Identify problems that are amenable to solution using State space search Algorithms
C53.2	Understand and analyse working of an AI technique using Heuristic search
C53.3	Understand and design the Bayesian Networks
C53.4	Understand and apply the concepts of Markov Decision process
C53.5	Apply the reinforcement learning methodologies
C53.6	Illustrate developing applications in an 'AI language', expert system shell, or data mining tool.

CO. No.	Description
Course Outcomes: C54 – Computer Networks (PC 504 IT)	
C54.1	Explain the function of each layer of OSI and trace the flow of information from one Node to another node in the network
C54.2	Understand the principles of IP addressing and internet routing
C54.3	Describe the working of various networked applications such as DNS, mail, file transfer and www
C54.4	Implement client-server socket-based networked applications
C54.5	To examine the important aspects and functions of network layer, transport layer and application layer in internetworking.
CO. No.	Description
Course Outcomes:C55 – Software Engineering (PC 505 IT)	
C55.1	Define different software development processes and their usability in different problem domains.
C55.2	Understand the process of requirements collection, analyzing, and modeling requirements for effective understanding and communication with stake holders.
C55.3	Design and develop the architecture of real world problems towards developing a blue print for implementation.
C55.4	Understand the concepts of software quality, testing and maintenance.
C55.5	Discuss the concepts related to risk management and Software Project Estimation.
CO. No.	Description
Course Outcomes:C56 – Distributed Systems (PE 513 IT)	
C56.1	Understand the design principles in distributed systems and the architectures for distributed systems.
C56.2	Understand how coordination occurs in distributed systems
C56.3	Understand how replicas are handled in distributed systems and consistency is maintained
C56.4	Analyze fault tolerance and recovery in distributed systems and algorithms for the same.
C56.5	Analyze the design and functioning of existing distributed systems and file Systems
C56.6	Implement different distributed algorithms over current distributed platforms.
CO. No.	Description
Course Outcomes:C57 – Computer Networks & Operating System Lab (PC 551 IT)	
C57.1	Understand the usage of basic commands ipconfig, ifconfig, netstat, ping, arp, telnet, ftp, finger, trace route, who is of LINUX platform.
C57.2	Develop and Implement Client-Server Socket based programs using TCP, and UDP sockets
C57.3	Develop and Implement Distance Vector Routing Algorithm
C57.4	Demonstrate how threads can be created and simultaneously handled in LINUX POSIX environment
C57.5	Understand possible Inter-Process Communication implementations using LINUX IPC Constructs. Develop and Implement RSA Public Key algorithm

CO. No.	Description
Course Outcomes:C58–Artificial Intelligence Lab (PC 552 IT)	
C58.1	Design and develop solutions for informed and uninformed search problems in AI.
C58.2	Demonstrate reasoning in first order logic using Prolog
C58.3	Utilize advanced package like NLTK for implementing natural language Processing
C58.4	Demonstrate and enrich knowledge to select and apply python libraries to synthesize information and develop supervised learning models
C58.5	Develop a case study in multidisciplinary areas to demonstrate use of AI
CO. No.	Description
Course Outcomes:C59-Web Application Development Lab (PC 552 IT)	
C59.1	Design Web pages and perform form validation using HTML5.0 in built functions.
C59.2	Apply Styles to the web content using CSS
C59.3	Create and process web publishing content using XML and JSON.
C59.4	Use JQuery to perform client-side Dynamics.
C59.5	Create single page applications (Front End)using AngularJS.
C59.6	Understand Big data applications using Mean stack or SMACK stack Frameworks



LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Information Technology

Course Outcomes

Academic Year – 2022-2023
Student will be able to

Semester: VII (OU)

CO. No.	Description
Course Outcomes:C71 – VLSI Design (PC 701 EC)	
C71.1	Explain VLSI Design hierarchy and analyse logic gates using CMOS & transmission gate structures.
C71.2	Identify the layers in the physical structure of ICs and draw the layouts of CMOS logic gates
C71.3	Summarize the fabrication process of CMOS ICs and analyse the DC, switching characteristics of CMOS inverter
C71.4	Analyse dynamic CMOS & pseudo nMOS structures of logic gates, SRAM & DRAM cells
C71.5	Develop Verilog code for logic gates, examine the effects of interconnect elements in logic cascades and Explain the floor-planning , routing techniques of VLSI circuits
CO. No.	Description
Course Outcomes:C72 – Big Data Analytics (PC 702 IT)	
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 – Cloud Computing(PE 713 IT)	
C73.1	Understand the architecture and concept of different cloud models: IaaS, PaaS, SaaS
C73.2	Create virtual machine images and deploy them on cloud
C73.3	Identify security and compliance issues in Cloud
C73.4	Understand various Computing paradigms
C73.5	Apply the concepts of real time applications
CO. No.	Description
Course Outcomes: C74 – Start Up Entrepreneurship (OE 701 ME)	
C74.1	Understand Indian Industrial Environment, Entrepreneurship and Economic growth, Small and Large Scale Industries, Types and forms of enterprises.
C74.2	Identify the characteristics of entrepreneurs, Emergence of first generation entrepreneurs, Conception and evaluation of ideas and their sources.
C74.3	Practice the principles of project formulation, Analysis of market demand, Financial and profitability analysis and Technical analysis.
C74.4	Understand the concept of Intellectual Property Rights and Patents
C74.5	Comprehend the aspects of Start-Ups

CO. No.	Description
Course Outcomes:C75 – VLSI Design Lab(PC 751 IT)	
C75.1	Demonstrate Xilinx ISE suite to write Verilog code for logic gates, combinational circuits and sequential circuits.
C75.2	Write Verilog code for basic logic gates, complex logic gates, combinational circuits, and sequential circuits using switch level, gate level, data flow and behavioral modelling
C75.3	Develop test bench code using Verilog and verify the simulation results.
C75.4	Demonstrate the FPGA implementation of digital circuits and generate the synthesis report
C75.5	Draw the layouts of basic logic gates using Microwind
CO. No.	Description
Course Outcomes:C76 – Big Data Analytics Lab (PC 752 IT)	
C76.1	Understand Hadoop working environment.
C76.2	Work with big data applications in multi node clusters
C76.3	Write scripts using Pig to solve real world problems
C76.4	Write queries using Hive to analyse the datasets
C76.5	Apply big data and echo system techniques for real world
CO. No.	Description
Course Outcomes:C77 – Project Work (PW 761 IT)	
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	Demonstrate effective written and oral communication skills
CO. No.	Description
Course Outcomes:C78 – Summer Internship (SI 762 IT)	
C78.1	Get Practical experience of software design and development, and coding practices within Industrial/R&D Environments.
C78.2	Gain working practices within Industrial/R&D Environments.
C78.3	Prepare reports and other relevant documentation.



Course Outcomes

Academic Year – 2022-2023

Year: IV - Semester: I (JNTUH)

Student will be able to

CO. No.	Description
Course Outcomes: C411 – Information Security(IT701PC)	
C411.1	Demonstrate the knowledge of cryptography, network security concepts and applications.
C411.2	Apply security principles in system design.
C411.3	Apply critical thinking and problem solving skills to detect current and future attacks on an organizations computer systems and networks
C411.4	Apply business principles to analyze and interpret data for planning, decision making , and problem solving in information security environment
C411.5	Understand the difference between threats and attacks
CO. No.	Description
Course Outcomes: C412 – Data Mining(CS703PC)	
C412.1	Understand the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system.
C412.2	Apply preprocessing methods for any given raw data.
C412.3	Extract interesting patterns from large amounts of data.
C412.4	Discover the role played by data mining in various fields.
C412.5	Choose and employ suitable data mining algorithms to build analytical applications
C412.6	Evaluate the accuracy of supervised and unsupervised models and Algorithms
CO. No.	Description
Course Outcomes: C413 – Cloud Computing(CS714PE)	
C413.1	Understand various service delivery models of a cloud computing architecture.
C413.2	Understand the ways in which the cloud can be programmed and deployed.
C413.3	Understanding cloud service providers.
C413.4	Analyze various cloud programming models and apply them to solve problems on the cloud
C413.5	Discuss system, network and storage virtualization and outline their role in enabling the cloud computing system model.

CO. No.	Description
Course Outcomes: C414 - Software Process and Project Management(CS725PE)	
C414.1	Gain knowledge of software economics, phases in the life cycle of software development, project organization, project control and process instrumentation
C414.2	Analyze the major and minor milestones, artifacts and metrics from management and technical perspective
C414.3	Design and develop software product using conventional and modern principles of software project management
C414.4	Identify the different project contexts and suggest an appropriate management strategy.
C414.5	Determine an appropriate project management approach through an evaluation of the business context and scope of the project.
CO. No.	Description
Course Outcomes: C415 –Information Security Lab(IT703PC)	
C415.1	Formulate information security governance, and related legal and regulatory issues.
C415.2	Device how threats to an organization are discovered, analyzed, and dealt with.
C415.3	Evaluate network security threats and countermeasures.
C415.4	Construct network security designs using available secure solutions (such as PGP, SSL, IPSec, etc)
C415.5	Acquire the knowledge of advanced security issues and technologies (such as DDoS attack detection and containment, and anonymous communications)