



Course Outcomes

Academic Year – 2021-2022

Semester: III (OU)

Student will be able to

CO. No.	Description
<b>Course Outcomes: C31 - Effective Technical Communication in English(HS201EG)</b>	
C31.1	Handle technical communication effectively
C31.2	Use different types of professional correspondence
C31.3	Use various techniques of report writing
C31.4	Acquire adequate skills of manual writing
C31.5	Enhance their skills of information transfer and presentations
CO. No.	Description
<b>Course Outcomes: C32 - Finance and Accounting(HS202CM)</b>	
C32.1	Evaluate the financial performance of the business unit.
C32.2	Take decisions on selection of projects.
C32.3	Take decisions on procurement of finances.
C32.4	Analyze the liquidity, solvency and profitability of the business unit.
C32.5	Evaluate the overall financial functioning of an enterprise.
CO. No.	Description
<b>Course Outcomes: C33 Mathematics - III(Probability and statistics)( BS207MT)</b>	
C33.1	Describe Probability, Conditional Probability, Random Variables and Probability Density Functions.
C33.2	Obtain the knowledge of some standard discrete probability distributions and its moments, kurtosis and skewness.
C33.3	Obtain the knowledge of some standard Continuous Probability distributions, Uniform and Exponential distributions.
C33.4	Learn the concepts of curve fitting correlation, regression, and obtain the knowledge on test of significances.
C33.5	Get the knowledge of testing of hypothesis for various parameters.
CO. No.	Description
<b>Course Outcomes: C34 - Basic Electronics(ES214EC)</b>	
C34.1	Study and Analyze the Rectifiers and Regulator Circuits.
C34.2	Analyze the construction & working of active devices like BJT & FET in various modes.
C34.3	Recognize the type of feedback and analyze its effect on amplifier characteristics and calculate the frequency of oscillation for different types of oscillator circuits.
C34.4	Analyze and design different circuits using Ideal Op Amps; Design simple digital circuits using logic gates.
C34.5	Analyze different data acquisition systems and data converters.

CO. No.	Description
<b>Course Outcomes: C35 - Digital Electronics(ES216EC)</b>	
C35.1	Explain the design process of digital hardware, use Boolean Algebra to minimize the logical expressions and optimize the implementation of logical functions.
C35.2	Explain the number representation and design combinational circuits like adders, MUX etc.
C35.3	Design Combinational circuits using PLDS and write Verilog HDL code for basic gates and combinational circuits.
C35.4	Analyse sequential circuits using flip-flops and design registers, counters.
C35.5	Represent a sequential circuit using Finite State Machine and apply state minimization techniques to design a FSM.
CO. No.	Description
<b>Course Outcomes: C36 - Data Structures(PC221IT)</b>	
C36.1	Implement the features of c++ and analyse time complexity of both iterative and recursive functions
C36.2	Define ADT necessary for solving problems based on Stacks and Queues using array implementation.
C36.3	Describe the Linked Lists and Use Hash functions and Handle Collisions
C36.4	Develop solutions using Binary Search Trees, Balanced BST and AVL Trees.
C36.5	Apply various searching and sorting techniques. Define Graph ADT and Graph Traversal Techniques.
CO. No.	Description
<b>Course Outcomes: C37 - Mathematical Foundations and Information Technology(PC222IT)</b>	
C37.1	Describe and use statements, notations, normal forms, predicates and rules of inference.
C37.2	Illustrate by examples the basic terminology of functions, relations, and sets and demonstrate knowledge of their associated operations.
C37.3	Explain basics of counting; apply permutations and combinations to handle different types of objects.
C37.4	Use recursively defined relationships to solve homogenous and non-homogenous recurrence relations.
C37.5	Represent and apply Graph Theory in solving computer science problems.

CO. No.	Description
<b>Course Outcomes: C38 - Basic Electronics Lab(ES251EC)</b>	
C38.1	Design diode circuits & demonstrate the application of Zener diode.
C38.2	Analyse characteristics of BJTs & FETs.
C38.3	Demonstrate the different oscillator circuits.
C38.4	Demonstrate operation of HWR & FWR circuits with & without filters
C38.5	Design Analog-to-Digital converters & Digital-to-Analog converters.
CO. No.	Description
<b>Course Outcomes: C39 - Data Structures Lab(PC252IT)</b>	
C39.1	Implement various data structures using arrays, linked lists.
C39.2	Develop ADT necessary for solving problems based on Stacks and Queues.
C39.3	Implement binary trees, general tree structures, advanced Search trees, heaps, graphs.
C39.4	Implement hash functions and handle collisions.
C39.5	Implement various kinds of sorting techniques and apply appropriate techniques for solving a given Problem.
CO. No.	Description
<b>Course Outcomes: C311 - IT Workshop Lab(PC253IT)</b>	
C310.1	Implement basic syntax in python.
C310.2	Demonstrate python looping, control statements and string manipulations
C310.3	Represent compound data using Python lists, tuples, and dictionaries
C310.4	Describe OOP Concepts and Perform various file management actions, Regular Expressions
C310.5	Implement MATLAB operations and graphic functions.



**Course Outcomes**

Academic Year – 2021-2022

Semester: V (OU)

Student will be able to

CO. No.	Description
<b>Course Outcomes:C51 – Web Application Development (PC 501 IT)</b>	
C51.1	Design and develop dynamic web sites using Html 5.0, CSS, jQuery
C51.2	Develop Web Content publishing applications that access data in XML or JSON format
C51.3	Apply Styles to the web content using CSS
C51.4	Develop single page web applications using Angular JS
C51.5	Design and develop big data data applications using Mean Stack and SMACK Stack Frameworks
CO. No.	Description
<b>Course Outcomes:C52 - Operating Systems (PC 502 IT)</b>	
C52.1	Explain the fundamental concepts and functions of operating system
C52.2	Implement various Process Scheduling Algorithms, Deadlock handling mechanisms.
C52.3	Analyze different Memory management techniques and working with virtual memory.
C52.4	Implement programs using file management system, analyze system performance, understand RAID & can work on I/O interfaces.
C52.5	Explain various security measures related to OS, implement protection mechanisms and implement RTOS.
CO. No.	Description
<b>Course Outcomes: C53- Automata Theory (PC 503 IT)</b>	
C53.1	Demonstrate abstract machines and their power to recognize the languages
C53.2	Construct Regular Expressions to for accepting the languages, and understand the Concept of Regular Languages and their Properties.
C53.3	Design context free grammars for formal languages and be able to use Pumping Lemma.
C53.4	Explain Push Down Automata and construct the PDA's for the given CFL.
C53.5	Construct the Turing Machines, and apply the knowledge of decidability for Post Correspondance Problems.

CO. No.	Description
<b>Course Outcomes: C54 – Computer Networks (PC 504 IT)</b>	
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	Describe 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	Examine the important aspects and terms of Network Layer, Transport layer and Application Layer in internetworks
CO. No.	Description
<b>Course Outcomes: C55 – Software Engineering (PC 505 IT)</b>	
C55.1	Define different software development processes and their usability in different problem domains
C55.2	Explain the process of requirements collection, analyzing and modeling requirements for effective demonstrating and communication with stakeholders
C55.3	Design and Develop the architecture of real-world problems towards developing a blueprint for implementation
C55.4	Demonstrate the concepts of Software Equality, testing and maintenance.
C55.5	Discuss the concepts related to Risk Management and Software Project estimation
CO. No.	Description
<b>Course Outcomes: C56 – Artificial Intelligence (PE 511 IT)</b>	
C56.1	Identify Problems that are amenable to solution using state space search algorithm
C56.2	Analyze working of an AI technique using Heuristic Search
C56.3	Demonstrate and design the Bayesian Networks.
C56.4	Apply the concepts of Markov Decision process.
C56.5	Apply the program and apply Reinforcement Learning.
CO. No.	Description
<b>Course Outcomes: C57 – Computer Networks Lab (PC531 IT)</b>	
C57.1	Demonstrate the usage of basic commands ipconfig, ifconfig, netstat, ping, arp, telnet, ftp, finger, traceroute, whois 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	Develop and Implement RSA Public Key algorithm
C57.5	Construct simple network by using any modern Open Source. Network Simulation Tool

CO. No.	Description
<b>Course Outcomes:C58 – Web Application Development Lab (PC541 IT)</b>	
C58.1	Design Web pages and perform form validation using HTML 5.0 In built functions.
C58.2	Apply Styles to the web content using CSS.
C58.3	Create and process web publishing content using XML and JSON
C58.4	Use JQuery to perform client-side Dynamics.
C58.5	Create single page applications (Front End) using Angular JS.
C58.6	Design Web pages and perform form validation using HTML 5.0 In built functions.
CO. No.	Description
<b>Course Outcomes:C59– Operating systems Lab(PC532 IT)</b>	
C59.1	Use different system calls for writing application programs.
C59.2	Creating threads in Linux/UNIX environment
C59.3	Implementing inter process communication between two Processes
C59.4	Evaluating various synchronization approaches used in Deadlock Management
C59.5	Implement paging replacement and disk scheduling techniques



**Course Outcomes**

Academic Year – 2021-2022

Year: IV & Semester: I (JNTUH)

Student will be able to

CO. No.	Description
<b>Course Outcomes: C411 – Information Security(IT701PC)</b>	
C411.1	Demonstrate the knowledge of cryptography, network security 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	Contrast the difference between threats and attacks
CO. No.	Description
<b>Course Outcomes: C412 – Data Mining(CS703PC)</b>	
C412.1	Articulate 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; Evaluate the accuracy of supervised and unsupervised models and Algorithms
CO. No.	Description
<b>Course Outcomes: C413 – Cloud Computing(CS714PE)</b>	
C413.1	Familiarize various service delivery models of a cloud computing architecture.
C413.2	Examine the ways in which the cloud can be programmed and deployed.
C413.3	Analyze Cloud Computing Architecture and Management
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
<b>Course Outcomes: C414 - Software Process and Project Management(CS725PE)</b>	
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
<b>Course Outcomes: C415 –Information Security Lab(IT703PC)</b>	
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)
CO. No.	Description
<b>Course Outcomes: C416 –Industry Oriented Mini Project(IT704PC)</b>	
C416.1	Acquire practical knowledge in spite of theoretical concepts he/she acquired (Application).
C416.2	Recognise uncertainty of open ended investigations like technical problems and difficulties in collecting the required data (knowledge).
C416.3	Differentiate open ended projects and set of practicals(Comparasion) .
C416.4	Develop their communication and team work skills (synthesis).
C416.5	Asses different tools /soft ware's and protocols which he used in the project(Evaluation).
CO. No.	Description
<b>Course Outcomes: C417 – Seminar(IT705PC)</b>	
C417.1	Improve oral and written communication skills.
C417.2	Explore an appreciation of the self in relation to its larger diverse social and academic contexts.
C417.3	Identify, understand and discuss current, real-world issues
C417.4	Distinguish and integrate differing forms of knowledge and academic disciplinary approaches
C417.5	Apply principles of ethics and respect in interaction with others.



CO. No.	Description
<b>Course Outcomes: C418 –Project Stage-I(IT706PC)</b>	
C418.1	Acquire practical knowledge in spite of theoretical concepts he/she acquired.
C418.2	Analyze uncertainty of open ended investigations like technical problems and difficulties in collecting the required data.
C418.3	Asses different tools /soft ware's and protocols which he used in the project.
C418.4	Simulate their Software results and dump into hardware for testing