

**Course Outcomes**

Academic Year – 2020-2021

Semester: IV (OU)

Student will be able to

CO. No.	Description
Course Outcomes: C41 - Operation Research (HS103ME)	
C41.1	Prepare the students to have the knowledge of Linear Programming Problem in operations
C41.2	Make the students to apply the knowledge of duality and sensitive analysis on different models.
C41.3	Demonstrate and apply the knowledge of Transportation Models and Assignment Problems in real world scenarios.
C41.4	Make students understand the concept of Replacement models and able to explain the application of Game theory in decision making for a conflict.
C41.5	Implement the knowledge of Sequencing, optimum model for job scheduling, Queuing theory and various optimization techniques.
CO. No.	Description
Course Outcomes: C42 - Signals and Systems (ES305EC)	
C42.1	Describe mathematical description and representation of continuous and discrete time signals and systems.
C42.2	Apply the properties of Fourier series for continuous time signals and can find Fourier transform for different signals
C42.3	Relate Laplace transforms to solve differential equations and to determine the response of the LTI systems to known inputs.
C42.4	Explain the Fourier analysis of discrete time signal models and representation of periodic signals.
C42.5	Apply Z- transform to analyze of continuous-time and discrete-time signals and systems.
CO. No.	Description
Course Outcomes: C43 - Java Programming (PC401IT)	
C43.1	Achieve proficiency in object oriented concepts also learn to incorporate the same in the Java Programming Language
C43.2	Implement interfaces, packages, Exception Handling, Multi-threading concepts in java .
C43.3	Implementation of Collection Framework and utility classes.
C43.4	Design and develop the GUI based Java Applications using Event Handling, JDBC.
C43.5	Develop and deploy web application using Swings and Servlets to address the real-world issues.
CO. No.	Description
Course Outcomes: C44 - Database Systems (PC402IT)	
C44.1	Define the fundamental concepts of database management and designing a database schema using ER modeling approach.
C44.2	Demonstrate the concepts of Normalization and identify functional dependencies.
C44.3	Apply the knowledge of indexing & transaction management for concurrency control and recovery of database systems.

C44.4	Ability to design entity relationship model and convert entity relationship diagrams into RDBMS and formulate SQL queries on the data using relational models.
C44.5	Apply the DDL, DML, DCL, TCL commands of SQL and understand the working process of DWH.
CO. No.	Description
Course Outcomes: C45 - Computer Organization and Microprocessor (PC403IT)	
C45.1	Explain the architecture of modern computers and bus structures.
C45.2	Analyze the different memories and evaluate the mapping techniques.
C45.3	Explain the architecture, the instruction set and addressing modes of 8085 processor.
C45.4	Analyze Stacks, Subroutine, Interrupts of 8085, different PPI techniques and understand the uses of interfaces and DMA controllers.
C45.5	Explain Programmable peripherals, communication interface and various device controllers.
CO. No.	Description
Course Outcomes: C46 - Data Communications (PC404IT)	
C46.1	Demonstrate systematic demonstrating of Data Communication Techniques
C46.2	Apply various encoding schemes
C46.3	Describe Multiplexing techniques
C46.4	Get acquainted with the concept of virtual circuit network
C46.5	Describe various types of switching techniques and Wireless LANs
CO. No.	Description
Course Outcomes: C47 - Microprocessor Lab (PC451IT)	
C47.1	Interpret the principles of Assembly Language Programming, instruction set in developing microprocessor-based applications.
C47.2	Develop Applications such as: 8-bit Addition, Multiplication, Division, array operations, swapping, negative and positive numbers.
C47.3	Analyze the interfaces like serial ports, digital-to-analog Converters and analog-to-digital converters etc.
C47.4	Build interfaces of Input-output and other units like stepper motor with 8085.
C47.5	Create a technical laboratory report.
CO. No.	Description
Course Outcomes: C48 - Java Programming Lab (PC452IT)	
C48.1	Develop Java applications using the concepts of Inheritance, interfaces, packages, access control specifiers.
C48.2	Implement the concepts of Exception Handling in java Applications
C48.3	Read and write data using different Java I/O streams.
C48.4	Create graphical user interfaces and Applets by applying the knowledge of Event Handling.
C48.5	Ability to solve real-world problems by designing user friendly GUI with befitting backend through the APIs of Java.
C48.6	Develop Java applications using the concepts of Inheritance, interfaces, packages, access control specifiers.

CO. No.	Description
Course Outcomes: C49 - Database Systems Lab (PC453IT)	
C49.1	Design and implement a database schema for a given problem
C49.2	Develop the query statements with the help of structured query language
C49.3	Populate and query a database using SQL and PL/SQL
C49.4	Develop multi-user database application with security features
C49.5	Design GUI using forms and implement database connectivity



Course Outcomes

Academic Year – 2020-2021

Semester:III-II (JNTUH)

Student will be able to

CO. No.	Description
Course Outcomes:C321 – Introduction to Embedded Systems (IT 601 PC)	
C321.1	Choose appropriate processors in the embedded domain.
C321.2	Articulate the Sensors, Actuators, Communication Interface etc. Of the Embedded Systems.
C321.3	Design embedded firmware and program in Embedded C.
C321.4	Describe the role of real-time operating systems in embedded systems.
C321.5	Integrate and test Embedded hardware and firmware ; debug target hardware.
CO. No.	Description
Course Outcomes:C322 – Principle of Compiler Construction (IT 602 PC)	
C322.1	Design, develop, and implement a lexical Analyzer.
C322.2	Design and implement LL and LR parsers for the given context free grammar
C322.3	Construct syntax trees, evaluate attributes, and design a type checker
C322.4	Design code generation algorithms by using Directed Acyclic Graphs
C322.5	Perform machine independent code optimization and analyze data flow between the Basics Blocks.
CO. No.	Description
Course Outcomes: C323 – Algorithm and Analysis Design(PC 603 IT)	
C323.1	Analyze the algorithms and evaluating the Space & time complexities of algorithms.
C323.2	Analyze Quick sort, merge sort , n-queen problem and graph coloring problems
C323.3	Apply the Dynamic Programming concept on 0/1 knapsack problem, All pair shortest problem and travelling sales persons problem.
C323.4	Analyze job sequencing problems, knapsack problem, minimum spanning tree and single source shortest path problems using Greedy Method.
C323.5	Apply Branch and Bound techniques for solving travelling sales person problem, 0/1 knapsack problem; Explain the differences between P, NP and NP complete problems.
CO. No.	Description
Course Outcomes: C324 –Internet of Things(IT 604 PC)	
C324.1	Interpret the impact and challenges posed by IoT networks leading to new architectural models.
C324.2	Compare and contrast the deployment of smart objects and the technologies to connect them to network.
C324.3	Use data structures, functions, packages, file handling capabilities and exception handling features of Python for solving IoT problems.

C324.4	Use Raspberry PI-interfaces and do python programming with Raspberry PI with focus of interfacing external gadgets.
C324.5	Explain cloud storage models, webserver for IoT and Python web application for frame Work for designing a RESTful API
CO. No.	Description
Course Outcomes:C325 – Mobile Application Development (CS 614 PE)	
C325.1	Explain Android OS design, features and components .
C325.2	Apply essential Android Programming concepts including designing of User Interfaces components.
C325.3	launch activities using Intents, Broadcasts and create Notifications.
C325.4	Create, read and retrieve data from files using shared preferences.
C325.5	Describe the concepts of SQLite database, operations on database using content providers.
CO. No.	Description
Course Outcomes:C326 – Disaster Preparedness and Planning Management	
C326.1	Explain the terms and concepts related to Disaster Management
C326.2	Describe the various categories of disasters and its specific characteristics
C326.3	Explain the pre-disaster, during disaster and post disaster measures and Frameworks
C326.4	Describe the disaster management acts and frameworks specific to India
C326.5	List and explain various technological applications to aid disaster Management
CO. No.	Description
Course Outcomes:C327 – Embedded Systems & Internet of Things Lab (IT 605 PC)	
C327.1	Perform Functional Testing of Devices and export the display onto other Systems.
C327.2	Develop a program Chronos eZ430 and control LED devices using light sensors.
C327.3	Design Monitor and control Battery Voltage and display the RSS news feed headlines on the LCD.
C327.4	Use Port Openwrt to the device and host a website on board.
C327.5	Interface and test the USB Webcam and perform TM Transmission.
CO. No.	Description
Course Outcomes:C328–Compiler Constructions Lab (IT 606 PC)	
C328.1	Develop LEX programs to scan reserved words and identifiers.
C328.2	Implement Predictive Parsing Algorithm.
C328.3	Develop programs to generate the Three Address Code..
C328.4	Implement SLR(1) Parsing Algorithm.
C328.5	Design and implement LL, LR and LALR Parsers.

CO. No.	Description
Course Outcomes: C329–Mobile Application Development Lab	
C329.1	Apply essential Android Programming concepts.
C329.2	Develop various Android applications related to layouts & rich uses interactive interfaces
C329.3	Develop Android applications related to mobile related server-less database like SQLITE
C329.4	Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces.