

**Course Outcomes**

Academic Year – 2021-2022

Semester: IV (OU)

Student will be able to

CO. No.	Description
Course Outcomes: C41 - Operation Research (HS103ME)	
C41.1	Gain the knowledge of Linear Programming Problem in Operations
C41.2	Understand the concept and develop the models for different applications
C41.3	Understand theory of game in operations research at the end students would able to explain application of game theory in decision making for a conflict
C41.4	Gain knowledge of Sequencing model and develop optimum model for job scheduling.
C41.5	Understand Queuing theory concepts and various optimization Techniques and develop models for waiting line cases.
CO. No.	Description
Course Outcomes: C42 - Signals and Systems (ES305EC)	
C42.1	Differentiate types of signals and systems in continuous and discrete time
C42.2	Apply the properties of Fourier transform for continuous time signals
C42.3	Relate Laplace transforms to solve differential equations and to determine the response of the Continuous Time Linear Time Invariant Systems to known input
C42.4	Apply Z-transforms for discrete time signals to solve Difference equations
C42.5	Relate Linear Convolution and Correlation of discrete time signals with graphical Representation
CO. No.	Description
Course Outcomes: C43 - Java Programming (PC401IT)	
C43.1	Achieve proficiency in object-oriented concepts and also learns to incorporate the same into the Java programming language.
C43.2	Create Java application programs using sound OOP practices e.g. Inheritance, interfaces and proper program structuring by using packages, access control specifiers.
C43.3	Understand and Implement the concepts of Exception Handling in java.
C43.4	Solve real-world problems through software development in high-level programming language using Large APIs of Java as well as the Java standard class library.
C43.5	Understand File, Streams, Input and Output Handling in java.
C43.6	Create graphical user interface and Applets in java as well as apply the knowledge of Event Handling.
CO. No.	Description
Course Outcomes: C44 - Database Systems (PC402IT)	
C44.1	Develop the knowledge of fundamental concepts of database management and Designing a database using ER modeling approach
C44.2	Implement storage of data, indexing, and hashing
C44.3	Apply the knowledge of transaction management, concurrency control and recovery of database systems
C44.4	Design entity relationship model and convert entity relationship diagrams into RDBMS and formulate SQL queries on the data.
C44.5	Apply normalization for the development of application software.

CO. No.	Description
Course Outcomes: C45 - Computer Organization and Microprocessor (PC403IT)	
C45.1	Understand the architecture of modern computer, Bus structures.
C45.2	Analyze the Different memories and evaluate the mapping techniques.
C45.3	Discuss the architecture, the instruction set and addressing modes of 8085 processor
C45.4	Analyze Stacks, Subroutine, Interrupts of 8085, different PPI techniques, the uses of interfaces 8259, RS 232C, USART (8251), and DMA controller
C45.5	Design the applications of interfacing circuits 8254/8253 timer, A/D and D/A converter, Keyboard/Display controller.
CO. No.	Description
Course Outcomes: C46 - Data Communications (PC404IT)	
C46.1	Demonstrate systematic understanding of Data Communication Techniques.
C46.2	Apply various encoding schemes.
C46.3	Understand multiplexing techniques.
C46.4	Get acquainted with the concepts of virtual circuit networks.
C46.5	Understand various types of switching techniques.
C46.6	Understand concepts of 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, and 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	Analyze the function of traffic light controller.
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	Create robust applications using Java standard class libraries and retrieve data from a database with JDBC.
C48.6	Solve real-world problems by designing user friendly GUI with befitting back end through the APIs of Java.
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
C49.5	Design GUI using forms and implement database connectivity



Course Outcomes

Academic Year – 2021-2022

Semester: VI (OU)

Student will be able to

CO. No.	Description
Course Outcomes:C61 – Embedded Systems (PC 601 IT)	
C61.1	Study and analysis of embedded systems.
C61.2	Design and develop embedded systems (hardware, software and firmware)
C61.3	Analyze, real time systems using RTOS and develop applications.
C61.4	Apply knowledge to interface various sensors and its applications in embedded systems.
C61.5	Understand principles of SOC design.
CO. No.	Description
Course Outcomes:C62 - Design and Analysis of Algorithms (PC 602 IT)	
C62.1	Compute and analyze complexity of algorithms using asymptotic notations.
C62.2	Analyze the performance of algorithms
C62.3	Write algorithms to solve various computing problems and analyze their time and space complexity
C62.4	Apply different algorithm design techniques to solve realworld problems and analyze their complexities.
C62.5	Describe algorithmic complexities of various well known computing problems.
CO. No.	Description
Course Outcomes: C63 - Distributed Systems(PE 616 IT)	
C63.1	Describe the problems and issues associated with distributed systems.
C63.2	Explain occurrence of coordination in distributed systems.
C63.3	Illustrate how replicas are handled in distributed systems and consistency is maintained.
C63.4	Distinguish the implementation of security in distributed systems.
C63.5	Understand design trade-offs in large-scale distributed systems
CO. No.	Description
Course Outcomes: C64 – Machine Learning (PE 625 IT)	
C64.1	Explain the strengths and weaknesses of many popular machine learning Approaches
C64.2	Recognize and implement various ways of selecting suitable model parameters for different machine learning techniques
C64.3	Design and implement various machine learning algorithms in a range of real-world applications
C64.4	Understand the broad collection of machine learning algorithms and problems.
C64.5	Apply structured thinking to unstructured problems.

CO. No.	Description
Course Outcomes:C65 – Information Storage and Management (PE 630 IT)	
C65.1	Understand logical and physical components of a storage infrastructure including storage subsystems
C65.2	Analyze storage networking technologies such as FC-SAN, NAS,IP-SAN and data archival solution-CAS
C65.3	Identify different storage virtualization technologies and their benefits.
C65.4	Understand business continuity solutions including, backup and recovery technologies and local and remote replication solutions
C65.5	Distinguish the architectures, features and benefits of Intelligent Storage Systems,
CO. No.	Description
Course Outcomes:C66 – Disaster Management (OE 601 CE)	
C66.1	Explain the terms and concepts related to Disaster Management
C66.2	Describe the various categories of disasters and its specific characteristics
C66.3	Explain the pre disaster, during disaster and post disaster measures and Frameworks
C66.4	Describe the disaster management acts and frameworks specific to India
C66.5	List and explain various technological applications to aid disaster Management
CO. No.	Description
Course Outcomes:C67 – Embedded Systems Lab (PC 631 IT)	
C67.1	Apply the basic concepts to develop an Interface for 8051 and ARM processors.
C67.2	Acquire basic knowledge about fundamentals of microcontrollers
C67.3	Demonstrate the RTOS Concepts by designing real time applications
C67.4	Compare various types of peripherals used in embedded systems.
C67.5	Design and develop embedded systems (Hardware, Software and Firmware)
CO. No.	Description
Course Outcomes:C68–Design and Analysis of Algorithms Lab (PC 632 IT)	
C68.1	Implement various searching and sorting techniques and estimate the complexities of searching and sorting algorithms.
C68.2	Solve knapsack problem using greedy method and dynamic programming
C68.3	Develop and implement shortest path algorithms using Travelling salesman problem and All pair shortest path problem.
C68.4	Apply backtracking technique to solve N-queen problem
C68.5	Construct graph traversals using breath first search and depth firstsearch.

**Course Outcomes**

Academic Year – 2021-2022

Year: III - Semester: II (JNTUH)

Student will be able to

CO. No.	Description
Course Outcomes: C321 – Introduction to Embedded Systems (IT 601 PC)	
C321.1	Study and analysis of embedded systems.
C321.2	Understand the selection procedure of processors in the embedded domain.
C321.3	Design procedure of embedded firm ware.
C321.4	Visualize the role of real time operating systems in embedded systems.
C321.5	Evaluate the correlation between task synchronization and latency issues
CO. No.	Description
Course Outcomes: C322 – Principle of Compiler Construction (IT 602 PC)	
C322.1	Design, develop, and implement a compiler for any language
C322.2	Use lex and yacc tools for developing a scanner and a parser
C322.3	Design and implement LL and LR parsers.
C322.4	Design algorithms to perform code optimization in order to improve the performance of a program in terms of space and time complexity.
C322.5	Design algorithms to generate machine code
CO. No.	Description
Course Outcomes: C323 – Algorithm Design and Analysis (IT 603 PC)	
C323.1	Compute and analyze complexity of algorithms using asymptotic notations.
C323.2	Analyze the performance of algorithms
C323.3	Choose appropriate data structures and algorithm design methods for a specified application
C323.4	Understand how the choice of data structures and the algorithm design methods impact the performance of programs
C323.5	Describe algorithmic complexities of various well known computing 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	Appraise the role of IoT protocols for efficient network communication
C324.4	Elaborate the need for Data Analytics and Security in IoT.
C324.5	Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry.

CO. No.	Description
Course Outcomes: C325 – Software Testing Methodologies(CS 615 PE)	
C325.1	Design and develop the best test strategies in accordance to the development model.
C325.2	Demonstrate the integration testing which aims to uncover interaction and compatibility problems as early as possible
C325.3	Discuss about the functional and system testing methods
C325.4	Demonstrate various issues for object oriented testing
C325.5	Develop skills in software test automation and management using latest tools.
CO. No.	Description
Course Outcomes: C326 – Embedded Systems and Internet of Things Labs(IT 605 PC)	
C326.1	Understand the selection procedure of processors in the embedded domain.
C326.2	Design procedure of embedded firm ware.
C326.3	Visualize the role of real time operating systems in embedded systems.
C326.4	Interpret the impact and challenges posed by IoT networks leading to new architectural models.
C326.5	Compare and contrast the deployment of smart objects and the technologies to connect them to network.
C326.6	Appraise the role of IoT protocols for efficient network communication
CO. No.	Description
Course Outcomes: C327 – Compiler Construction Lab(IT 606 PC)	
C327.1	Design and develop interactive and dynamic web applications using HTML, CSS, JavaScript and XML
C327.2	Apply client-server principles to develop scalable and enterprise web Applications
C327.3	Design, develop, and implement a compiler for any language.
C327.4	Use lex and yacc tools for developing a scanner and a parser
C327.5	Design and implement LL and LR parsers
CO. No.	Description
Course Outcomes: C328 – Software Testing Methodologies Lab(CS 625 PE)	
C328.1	Design and develop the best test strategies in accordance to the development model.
C328.2	Understand the basic concepts of testing, path testing and sensitization
C328.3	Demonstrate the integration testing which aims to uncover interaction and compatibility problems.
C328.4	Discuss about the functional and system testing methods



Course outcomes

Academic Year – 2021-2022

Year: IV Semester: II (JNTUH)

Student will be able to

CO. No.	Description
Course Outcomes: C421 – Organizational Behavior (CS 815 PE)	
C421.1	Understand the conceptual framework and the theories underlying Organizational Behavior.
C421.2	Demonstrate how to make better decisions both individually and in a group.
C421.3	Analyze the interpersonal communication process to increase their effectiveness as communicators.
C421.4	Describe how to ethically use power, politics, and influence to accomplish their work.
C421.5	Apply different motivational theories and methods to increase the productivity and job satisfaction of employees.
CO. No.	Description
Course Outcomes: C422 – Cyber Forensics (SM 801 MS)	
C422.1	Understand the usage of computers in forensic, and how to use various forensic tools for a wide variety of investigations.
C422.2	Get an opportunity to continue their zeal in research in computerforensics
C422.3	Design and develop security architecture for an organization.
C422.4	Design operational and strategic cyber security strategies and policies
CO. No.	Description
Course Outcomes: C423 –Environmental Impact Assessment (CE800OE)	
C423.1	Identify the environmental attributes to be considered of the EIA study.
C423.2	Formulate objectives of EIA
C423.3	Identify the methodology to prepare rapid EIA
C423.4	Prepare EIA reports and environmental management plans.