LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science

Course Outcomes

Academic Year – 2025-2026 **Semester: V (A)**

At the end of the course student will be able to

CO. No.	Description
Course Outcomes: Design and Analysis of Algorithm (U23IT501)	
C51.1	Demonstrate the use of Asymptotic notations to find the efficiency of Algorithms.
C51.2	Apply Divide-and-Conquer and Transform-and-Conquer to Solve Real World Problem.
C51.3	Apply Greedy Approach and Dynamic Programming problem solving Techniques to solve real world problems.
C51.4	Analyze the Pattern Matching Algorithms and Distinguish P and NP Problems
C51.5	Apply and Analyze Backtracking and Branch and Bound approaches for solving real world problems
CO. No.	**Description**
Course Outcomes: Automata Theory, Languages and Computation (U23CS501)	
C52.1	Design a Finite Automaton and establish its correspondence with regular languages.
C52.2	Analyze Regular Expressions and Prove a given language is regular or not.
C52.3	Design Pushdown Automata for recognizing context-free languages and establish equivalence of language of PDA and CFG.
C52.4	Convert the given CFG into CNF and GNF
C52.5	Design Turing Machine for the given language and illustrate it's working and address their importance in computational Problems
CO. No.	**Description**
Course Outcomes: Software Engineering (U23CD501)	
C53.1	Describe and compare alternative approaches and techniques used across various phases of the software development lifecycle
C53.2	Develop a complete software project independently by applying appropriate design principles, tools, and methodologies.
C53.3	Identify and analyze the real-world challenges involved in developing large-scale software systems.
C53.4	Design and construct software architecture independently or in a team by recognizing recurring problems and applying relevant design patterns.
C53.5	Evaluate software product quality using appropriate metrics while addressing practical development challenges.
CO. No.	**Description**
Course Outcomes: Artificial Intelligence (U23CM502)	
C54.1	Understand the Intelligent agents and its characteristics.
C54.2	Apply the various search strategies and algorithms for problem solving.

C54.3	Analyze various logical reasoning techniques to infer knowledge and solve problems in knowledge-based systems.
C54.4	Explain the architecture of intelligent agents and describe the working of multi-agent systems.
C54.5	Analyze AI applications in NLP, IR, speech, and robotics systems.

CO. No.	Description
Course Outcomes: Disaster Preparedness and Management (U23CE508)	
C55.1	Apply the concepts of disaster management to evaluate a disaster situation.
C55.2	Classify the various categories of disasters and their specific characteristics.
C55.3	Select appropriate pre-disaster, during disaster and post-disaster measures and framework
C55.4	Apply the geo informatics technology in disaster situation.
C55.5	To Recommend and identify the disaster management acts and frameworks specific to India relevant to a situation.
CO. No.	**Description**
Course Outcomes: Design and Analysis of Algorithms Lab (U23CS501)	
C56.1	Implement and compare complexities in sorting and searching algorithms using Divide and Conquer on numbers and objects.
C56.2	Apply matrix operations and graph algorithms like Floyd-Warshall, Prim's, and Kruskal's.
C56.3	Solve optimization problems using greedy techniques on knapsack and job sequencing.
C56.4	Develop solutions for shortest path problems and apply backtracking technique on N-Queens.
C56.5	Implement pattern matching using Naïve and KMP algorithms and analyze their efficiency.
CO. No.	**Description**
Course Outcomes: Software Engineering Lab (U23CD5L1)	
C57.1	Recall the basic principles of Software Engineering and UML modeling.
C57.2	Interpret and explain use-case diagrams, class diagrams, and activity diagrams for software requirements.
C57.3	Construct various UML diagrams (use case, class, sequence, collaboration, activity, state, component, deployment).
C57.4	Analyze software requirements to select appropriate modeling techniques and tools.
C57.5	Evaluate the consistency and correctness of UML diagrams with respect to given requirements
Course Outcomes: Artificial Intelligence Lab (U23CM5L1)	
C58.1	Recall the basic principles of Software Engineering and UML modeling.
C58.2	Interpret and explain use-case diagrams, class diagrams, and activity diagrams for software requirements.
C58.3	Construct various UML diagrams (use case, class, sequence, collaboration, activity, state, component, deployment).
C58.4	Analyze software requirements to select appropriate modeling techniques and tools.
C58.5	Evaluate the consistency and correctness of UML diagrams with respect to given requirements

CO. No.	Description
Course Outcomes: Internship (U23IT5P1)	
C59.1	Design and develop a small and simple product in hardware or software.
C59.2	Complete the task or realize a pre specified target, with a specified scope.
C59.3	Identify and evaluate the alternate viable solutions for a given problem with reference to the specified criteria
C59.4	Gives knowledge of working practices within industrial / R&D environments.
C59.5	Implement the selected solution and document the same.
CO. No.	**Description**
Course Outcomes: Aptitude and Reasoning (U23MA5L1)	
C510.1	Develop the ability to analyze and evaluate arguments and information critically.
C510.2	Enhance problem-solving skills through various reasoning techniques and methodologies.
C510.3	Improve numerical reasoning abilities, including calculations, data interpretation, and quantitative analysis.
C510.4	Strengthen verbal reasoning skills through reading comprehension, logical reasoning, and verbal analogy exercises.
C510.5	Develop skills to manage time efficiently while solving reasoning problems under timed conditions.