

3-1(R16)

1) Design and Analysis of Algorithms

Course Outcomes:

- Ability to analyze the performance of algorithms.
- Ability to choose appropriate algorithm design techniques for solving problems.
- Ability to understand how the choice of data structures and the algorithm design methods impact the performance of programs.
- To clear up troubles the usage of set of rules design methods including the grasping approach, divide and overcome, dynamic programming, backtracking and department and certain.
 - To understand the variations among tractable and intractable problems.
 - To introduce p and np classes.

2) Data Communication and Computer Networks

Course Outcomes:

- Students should be understand and explore the basics of Computer Networks and Various Protocols. He/She will be in a position to understand the World Wide Web concepts.
- Students will be in a position to administrate a network and flow of information further he/she can understand easily the concepts of network security, Mobile and ad hoc networks.
 - Able to introduce the fundamental various types of laptop networks.
 - Get introduce with demonstration of the TCP/IP and OSI fashions with merits and demerits.
 - Awarded with the knowledge to explore the various layers of OSI model.
 - Able to introduce UDP and TCP models.

3) Software Engineering

Course Outcomes:

- Ability to identify the minimum requirements for the development of application.
- Ability to develop, maintain, efficient, reliable and cost effective software solutions
- Ability to critically thinking and evaluate assumptions and arguments.

4) Fundamentals of Management

Course Outcome:

The students understand the significance of Management in their Profession. The various Management Functions like Planning, Organizing, Staffing, Leading, Motivation and Control aspects are learnt in this course. The students can explore the Management Practices in their domain area.

5) Open Elective –I

Disaster management

At the end of the course, the student will be able to:

- Understanding Disasters, man-made Hazards and Vulnerabilities
- Understanding disaster management mechanism
- Understanding capacity building concepts and planning of disaster managements
- The course also provide different disasters, tools and methods for disaster management

6) Design and Analysis of Algorithms Lab

Course Outcomes:

- Ability to write programs in java to solve problems using algorithm design techniques such as Divide and Conquer, Greedy, Dynamic programming, and Backtracking.

- Able to implement Quick sort ,Merge sort algorithm, BFS and DFS algorithms
- Able to implement backtracking algorithm for the N-queens problem.
- Able to implement greedy algorithm for job sequencing with deadlines.
- Get awarded with Dijkstra's , Prim's algorithm , Kruskal's algorithm on spanning tree
- Able to implement Floyd's algorithm for the all pairs shortest path problem.
- Able to Write a Dynamic Programming algorithm for the 0/1 Knapsack problem and also Dynamic Programming algorithm for the Optimal Binary Search Tree Problem.

7) Computer Networks Lab

Course Outcomes:

- Ability to understand the encryption and decryption concepts in Linux environment
- Ability to apply appropriate algorithm for the finding of shortest route.
- Ability to configure the routing table

8) Software Engineering Lab

Course Objectives:

- To understand the software engineering methodologies involved in the phases for project development.
- To gain knowledge about open source tools used for implementing software engineering methods.
- To exercise developing product-startups implementing software engineering methods.
- Open source Tools: StarUML / UMLGraph / Topcased

9) Professional Ethics

Course Outcome:

- The students will understand the importance of Values and Ethics in their personal lives and professional careers.

- The students will learn the rights and responsibilities as an employee, team member and a global citizen.
- Able to imbibe and internalize the Values and Ethical Behavior in the personal and Professional lives.
- Able to get practice of right and responsibilities at work place
- Able to understand topics very easily like International Trade, World Summits, Issues, Business Ethics and Corporate Governance, Sustainable Development Ecosystem, Energy Concerns, Ozone Deflection, Pollution, Ethics in Manufacturing and Marketing, Media Ethics; War Ethics; Bio Ethics, Intellectual Property Rights.