Department of Computer Engineering, SVNIT, Surat

M Tech I - 1st Semester, Syllabus and Course Plan, COs

CourseCode: Design and Analysis of Algorithms 3-0-2

Last Edited: 28th Aug 2022

Course Plan

Date	Lect no	Topic(s) to be covered	Hours
16/8/22	1-2	Introduction, Syllabus, Evaluation scheme, Discussing the problem oriented and assignment centric approach that would be followed. Pseudocode notations to be used. Algorithm analysis Techniques to be employed - illustrating mathematical analysis.	2
17/9/21	3	Illustrating mathematical analysis using the Insertion sort. Justification for using the asymptotic analysis.	1
23/8/22	4-5	Missed due to inauguration of Forensics Lab. Adjusted on ********	2
24/8/22	6	Approach for empirical analysis, the program to use in the lab. The algorithm BINEXPONENT analysis. Reading Assignment: Asymptotic notations.	1
30/8/22	7-8	Illustrating the failure of Heuristics based approach to solve a problem, using the Robot Arm problem. The need for formal correctness proof. Solving illustrative problems on expressions involving Asymptotic Notations. Lower bound on sorting and the Counting sort.	2
31/8/22	9	Divide and Conquer design technique. Illustrating Merge-sort and its analysis.	1