



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### ATTAINMENT OF COURSE OUTCOMES (COS) – ACTION PLAN

Name of the Faculty	<b>Dr. K. Suvarchala</b>	Department	<b>CSE</b>
Regulations	<b>R16</b>	Batch	<b>2017 -2021</b>
Course Name	<b>Design and Analysis of Algorithms</b>	Course Code:	<b>AIT001</b>
Semester	<b>III</b>	Target Value	<b>70% (2.1 on 3 Scale)</b>

#### Attainment of COs:

Course Outcomes		Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Find the (worst case, randomized, amortized) running time and space complexity of given algorithms using techniques such as recurrences and properties of probability.	0.3	2.4	0.7	Target not attained
CO2	Apply divide and conquer algorithms for solving sorting, searching and matrix multiplication.	0.6	2.4	1	Target not attained
CO3	Make Use of appropriate searching and traversal techniques for finding shortest path to the given problem.	1.3	2.4	1.5	Target not attained
CO4	Identify suitable problem-solving techniques for a given problem and finding optimized solutions using Greedy and Dynamic Programming techniques	2	2.4	2.1	Target attained
CO5	Utilize backtracking and branch and bound techniques to deal with traceable and in-traceable problems.	1.6	2.4	1.8	Target not attained
CO6	Describe the classes P, NP, NP-Hard, NP-complete for solving deterministic and non-deterministic problems.	1.6	2.4	1.8	Target not attained

#### Action taken report:

CO1, CO2: Provide application-based problems on searching and sorting which should be analyzed and solved by students with appropriate design strategy.

CO3: Arrange hands-on experience workshop to demonstrate shortest path algorithms by using various design strategies.

CO5, CO6: Organize expert lectures on branch and bound, backtracking and non-deterministic problems to make students realize its importance in game development and approximate solutions.

Course Coordinator

Mentor

HOD

Head of the Department  
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