INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500043, Telangana

CIVIL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Mr. GUDE RAMA KRISHNA**	Department:	**Civil Engineering**
Regulation:	**IARE - UG20**	Batch:	**2021-2025**
Course Name:	**Ground Improvement Techniques**	Course Code:	**ACEC47**
Semester:	**VIII**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Recall the problems associated with existing ground conditions to propose a suitable method for ground improvement.	0.90	2.30	1.2	Not Attained
CO2	Explain the various methods of mechanical modification to increase the bearing capacity of soil.	0.90	2.30	1.2	Not Attained
CO3	Interpret the existing ground condition for design of the dewatering systems to control the seepage of ground water.	0.90	2.30	1.2	Not Attained
CO4	Select the appropriate geosynthetics to increase the bearing capacity of the subgrade soil.	0.90	2.30	1.2	Not Attained
CO5	Identify the suitable grouting technique based on the in-situ evidences to prevent the foundation settlements.	0.90	2.30	1.2	Not Attained
CO6	Choose the appropriate soil -reinforcement techniques to increase the stability of soils.	0.90	2.30	1.2	Not Attained

Action Taken Report: (To be filled by the concerned faculty / course coordinator)

CO1: Conducted a seminar on "Digital Twin–Enabled Resilient and Sustainable Infrastructure" demonstrating how existing ground condition problems can be analyzed.

CO2: Delivered tutorials on mechanical stabilization methods, highlighting the principles and applications for increasing soil bearing capacity.

CO3: Provided case studies demonstrating successful control of groundwater seepage in various soil conditions.

CO4: Arranged laboratory experiments to observe improvements in compaction, shear strength, and settlement behavior using geosynthetics.

CO5: Organized field demonstrations showing application methods of different grouts in foundations and embankments.

CO6: Conducted a seminar on "AI in Sustainable Construction: Risk-Aware, Data-Driven Development" highlighting the selection of appropriate soil-reinforcement techniques and AI-based approaches to enhance soil stability.

Course Coordinator

Mentor

Head of the Department

Head of the Department
Civil Engineering
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