



KRISHNASAMY COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE & Affiliated to Anna University

Anand Nagar, Nellikuppam Main Road, Kumarapuram, Cuddalore – 607 109.

Phone no.(04142) 285 601- 604

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info@kcet.in

DEPARTMENT OF CIVIL ENGINEERING

(Academic Year 2018-2019)

Date: 20.11.2018

CIRCULAR

It is planned to conduct a value added course for III & IV year Civil Engineering students on the subject given below. Each module is scheduled from 10.12.2018 to 17.12.2018. The course plan, test procedure, attendance are followed as per regulation 2013. It is highly advised that the students should attend all the sessions and get benefited of the course.

The syllabus for the same has been formulated and will be circulated to students. The eminent staff from our department is invited to give lectures on topics from syllabus.

S.No	Year/Sem	Code/Name of the subject	Duration in Hours	Subject Incharge
1	IV/VII	CE-VAC1801/Ground Reinforcement Techniques	30	Er.C.Sureshkumar AP/Civil
2	III/V	CE-VAC1802/ Engineering for Wind	30	Er.P.Dhinesh kumar AP/Civil

P. Qui
19/11/18

HOD

Mys
20/11/18

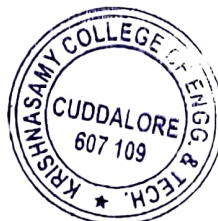
VICE PRINCIPAL

J. Suresh Kumar
PRINCIPAL

Copy to :

Class Room

Class In charge





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SYLLABUS

Subject Code/ Subject Name : CE-VAC1801-Ground Reinforcement Techniques

Duration :30 Hours

Objective : After this course, the student is expected to identify basic deficiencies of various soil deposits and he/she be in a position to decide various ways and means of improving the soil and implementing techniques of improvement.

Module 1

Introduction -Role of ground Reinforcement in foundation engineering - methods of ground improvement – Geotechnical problems in alluvial, laterite and black cotton soils -Selection of suitable ground improvement techniques based on soil condition.

Module 2

Dewatering And Drainage - techniques - Well points - Vacuum and electroosmotic methods - Seepage analysis for two dimensional flow-fully and partially penetrating slots in homogenous deposits (Simple cases only).

Module 3

Treatment Of Cohesionless And Cohesive Soils -Insitu densification of cohesionless and consolidation of cohesive soils -Dynamic compaction and consolidation - Vibrofloatation - Sand pile compaction - Preloading with sand drains and fabric drains – Stone columns – Lime piles.

Module 4

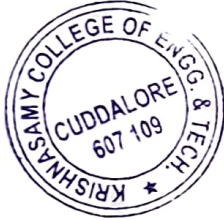
Reinforcement Of Earth -Concept of reinforcement - Types of reinforcement material - Applications of reinforced earth – use of Geotextiles for filtration, drainage and separation in road and other works.

Module 5

Grouting Techniques -Types of grouts - Grouting equipment and machinery - Injection methods - Grout monitoring – Stabilisation with cement, lime and chemicals - Stabilisation of expansive soils.

COURSE OUTCOMES: At the end of the course the student will be able to

- Gain knowledge on methods and selection of ground improvement techniques.
- Understand dewatering techniques and design for simple cases.
- Get knowledge on insitu treatment of cohesionless and cohesive soils.
- Understand the concept of earth reinforcement and design of reinforced earth.
- Get to know types of grouts and grouting technique.



P. Pui
19/11/18
HOD / CIVIL