



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Civil Engineering

Academic Year 2022 – 2023 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. Civil Engineering

Course Code & Title: CE3404 – Soil Mechanics

Name of the Faculty member (s): Mrs.D.Darling Helen Lydia

Innovative Practice Description

- **Unit / Topic:** Unit IV – Shear Strength / Triaxial Test
- **Course Outcome:** CO4
- **Topic Learning Outcome:** TLO18
- **Activity Chosen:** Virtual Lab
- **Justification:**

Shear strength of soil can be determined by many tests like direct shear test, triaxial test, unconfined compression test & Vane shear test. In this, triaxial test which cannot be performed accurately in the laboratory can be virtually experienced using virtual lab.

- **Time Allotted for the Activity:** 20 Minutes

- **Details of the Implementation:**

The Virtual lab is a very commonly used classroom assessment technique. It really does take about 30 minutes for listening and, while usually take 10 minutes for problem solving at the end of class. I asked all students to perform the triaxial test using virtual lab .

CO – PO / PSO mapping:

CO	PO1	PO2	PO6	PO7	PO12
CO1	3	3	2	1	1

(1 – Low 2 – Moderate 3 – High)

- **PO / PSO mapped:**

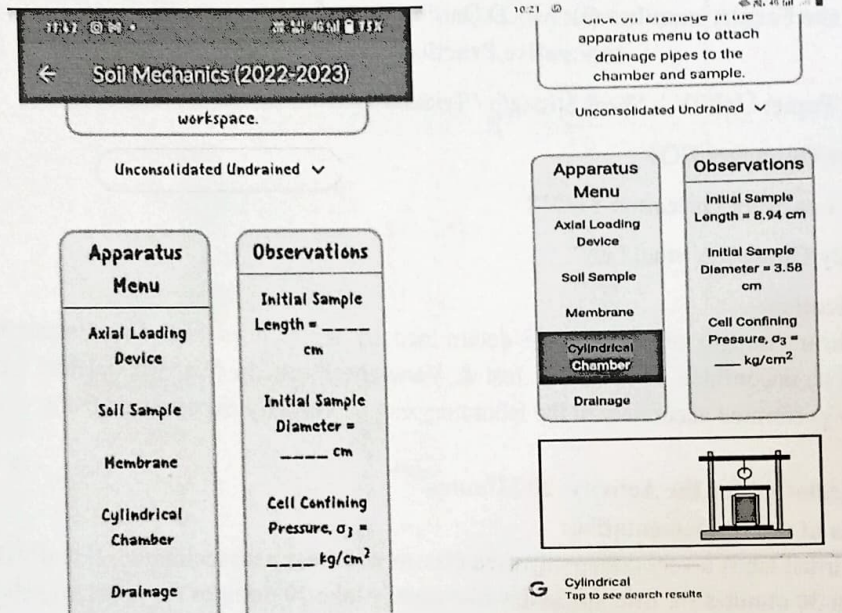
Innovative practice	PO1	PO2	PO6	PO7	PO12
	3	3	2	1	1
Justification for correlation	Apply the knowledge of engineering fundamentals	Identify, formulate, review research literature, and analyze complex engineering problems	Apply reasoning informed by the contextual knowledge relevant to the professional engineering practice.	Understand the impact of the professional engineering solutions need for sustainable development.	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

• Images / Screenshot of the practice:



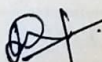
Reflective Critique:


❖ Feedback of practice from students and other stakeholders:

Oral feedback was received from students and most of them conveyed that it gives the feel like doing in laboratory.

Benefit of the practice:

This practice certainly would develop strong basic knowledge. They can use this virtual laboratory from anywhere.


Signature of Faculty Member


HOD/Incharge