

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY

TENTATIVE TEACHING PLAN

DEPARTMENT/INSTITUTE/DIRECTORATE: CIVIL ENGINEERING

Name of Teacher: **Engr. Ali Raza Lashari/ Engr. Mahapara**

Subject: **Soil Mechanics (Practical)**

Course Code: **CE326**

Batch: **20CE (A+B+C+D)**

Year: **3rd**

Semester: **6th**

Semester Starting Date: **03-07-2023**

Semester Suspension Date: **20/10/23**

Course Learning Outcomes (CLOs):

Upon successful completion of the course, the student will be able to:

CLO No.	Description	Taxonomy level	Linking to PLO
3	PRACTICE laboratory testing to determine index properties of soil, flow of water through soil and consolidation parameters of soil	P3	4

Sr. #	Description of Topic	No. of practical hours. Required
1	Introduction to the Soil Mechanics Laboratory and HSE (Health, Safety and Environment) measures.	3
2	Collection of soil samples from field and to prepare the representative soil sample for laboratory testing: a). Quartering Method b). Riffle Box Method	3
3	To determine the water content of soil sample by: a). Oven Drying Method b). Hot Plate Method c). Sand Bath Method d). Speedy Moisture Tester e). Infrared Moisture Tester	3
4	To determine the particle size distribution of coarse-grained soil by Sieve Analysis.	3
5	To determine the particle size distribution of fine-grained soil by Hydrometer Analysis.	3
6	To determine the liquid limit of fine-grained soil by Casagrande Apparatus	3
7	To determine the liquid limit of fine-grained soil by Fall Cone (Penetrometer) Method.	3
8	To determine the plastic limit of the fine-grained soil by Glass Plate.	3
9	To determine the shrinkage limit of fine-grained soil.	3
10	To determine the specific gravity of fine-grained soil by Density Bottle Method.	3
11	To determine the coefficient of permeability of coarse-grained soil by Constant Head Method.	3
12	To determine the coefficient of permeability of fine-grained soil by Falling Head Method.	3

13	To determine consolidation parameters of saturated fine-grained soil by One Dimensional Consolidation Test.	6
14	To determine free swell of clayey soils.	3
15	To perform Open ended lab.	3
	Total	48

Signature of Teacher:

Dated: 15-06-2023

Remarks of DMRC: APPROVED

Signature of Chairman:

Dated: 01-08-2023