



# MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY

## TENTATIVE TEACHING PLAN

DEPARTMENT/INSTITUTE/DIRECTORATE: CIVIL ENGINEERING

Name of Teacher: **Dr. Fahad Abro/Engr. Ali Raza Lashari/ Engr. Abdul Latif Jamali**

Subject: **Mechanics of Solids-I (Practical)**

Course Code: **CE212**

Batch: **23CE (A+B+C+D)** Year: **2<sup>rd</sup>**

Semester: **3<sup>th</sup>**

Semester Starting Date: 15-07-2024

Semester Suspension Date: 06-11-2024

### 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 various laboratory tests to determine various properties of materials.	P3	4

Sr. #	Description of Topic	No. of practical hours. Required
1.	Introduction to Laboratory and HSE measures.	3
2.	To determine the diameter and unit weight of metallic bar.	3
3.	To determine the yield strength, proportional limit, ultimate strength of steel bars and develop stress-strain relationship.	3
4.	To determine percentage elongation and percentage reduction in area of steel bar.	3
5.	To perform the bend test of steel bar.	3
6.	To determine the shear strength of steel bars.	3
7.	To determine shear modulus and poisson's ratio for metals.	6
8.	To determine the location of neutral axis in the beam cross-section and compare it with the theoretical value.	3
9.	To determine bending stress and deflection of simply supported beams.	3
10.	To determine bending stress and deflection of cantilever beams.	3
11.	To perform torsional test on steel bars and determine modulus of rigidity.	3
12.	To perform hardness/toughness test on steel bars.	3
13.	To determine impact strength of steel bars.	3
14.	To determine the stiffness of the spring.	3
15.	To perform an open-ended lab.	3
	<b>Total</b>	<b>48</b>

Signature of Teacher:

Dated: 10-09-2024

Remarks of DMRC: APPROVED

Signature of Chairman:

Dated: 18-09-2024