



MECHANICS OF SOLIDS LAB

Courses Covered:

1. CET-213-L-Mechanics of Solids

**DEPARTMENT OF CIVIL ENGINEERING
TECHNOLOGY
PUNJAB TIANJIN UNIVERSITY OF TECHNOLOGY,
LAHORE**

Course Title: CET-213-L-Mechanics of Solids

List of Experiments:

1. To study the stress strain curve of different materials.
2. To study the different stresses on the object.
3. To find the elastic modulus of different materials.
4. To study the yield strength and bending test on steel.
5. To study the yield strength and bending test on Wood.
6. To study the yield strength and bending test on Concrete.
7. To determine the principal stress using strain rosette and graphical methods (Mohr's Circle).
8. To determine the shear center of different structural shapes.
9. To study the biaxial bending behavior of various structural and non-structural shapes.
10. To study the stress trajectories for the wooden beam element.

List of Equipment's:

1. Universal Testing Machine (Quantity = 01).
2. Torsion Testing Machine (Quantity = 01).
3. Electric Cement bending Test Machine/Compression Flexural Tester for Cement (Quantity = 01).
4. Splitting Tensile Test Device (Quantity = 01).
5. Deflection of Beams (without force gauges), (Quantity = 01).
6. Torsion of Bars (Quantity = 01).



Torsion Testing Machine



Compression Flexural Tester for Cement



Deflection of Beams



Torsion of Bars



Splitting Tensile Test Device



Universal Testing Machine