

KCE-452 Solid Mechanics Lab

S.No.	Name of major equipment/setup
1	Three hinged arch apparatus.
2	Two hinged arch apparatus.
3	Column buckling apparatus.
4	Elastic properties of a beam apparatus.
5	Unsymmetrical bending apparatus
6	Verification of Maxwell theorem apparatus.
7	Deflection of curved member apparatus.
8	UTM
9	Charpy & IZOD
10	Brennel & Rockwell

LIST OF EXPERIMENTS
KCE-452 SOLID MECHANICS LAB

Note: Students will perform a minimum of 10 experiments from the following:

1. Tension test on Mild Steel
2. Bending tests on simply supported beam and Cantilever beam.
3. Determination of torsion and deflection,
4. Measurement of forces on supports in statically determinate beam,
5. Determination of shear forces in beams,
6. Determination of bending moments in beams,
7. Measurement of deflections in the statically determinate beam.
8. To determine the Flexural Rigidity (EI) of a given beam
9. To find the deflection of curved members.
10. To find Critical load in Struts with different end conditions.
11. Hardness Test (Brinell's and Rockwell)
12. Impact test (Charpy and IZOD)