Strength of Materials Lab

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The objective of the strength of materials lab is to show the fundamental standards of strength of materials and structural analysis to the undergraduate students. Measuring the properties of the materials such as impact strength, tensile strength, compressive strength, hardness, ductility is conducted in the lab. The lab delivers to carried out the research related to the strength properties of materials for post graduate students and research scholars.

List of Equipment

S. No.	Name of the equipment
1	Brinell's Hardness testing machine
2	Spring testing machine
3	Torsion testing machine
4	Tensile testing machine
5	Universal Impact testing machine
6	Universal testing machine
7	Microscope
8	Extensometer
9	Dial Gauge with stand

List of experiments for Undergraduate students

S. No.	Title of the experiment
1	Determination of young's modulus for a given specimen by performing uniaxial tension test with Universal testing machine.
2	Determination of the shear stress and modulus of rigidity for a given sample by torsion test.
3	Determination of deflection, young's modulus and bending stress of a cantilever beam.
4	Determination of deflection, young's modulus and bending stress of a simply supported beam.
5	Determination of the hardness of the specimen.
6	Determination of the impact strength of the specimen by Izod and Charpy test.
7	Determination of modulus of rigidity of the spring and stiffness of closed coil helical spring.
8	Determination of modulus of rigidity of the spring and stiffness of open coil helical spring.

Major Equipments

Universal Testing Machine

Torsion Testing Machine

Impact Testing Machine

Harness Testing Machine