MECHANICS OF MATERIALS-II LAB (ME-215L)

Pre-requisite: None
Credit Hours: 01
Contact Hours: 48

RECOMMENDED BOOK(S)

Mechanics of Materials Laboratory Manual

COURSE OBJECTIVES

To improve students' cognitive and psychomotor skills. To understand the basic principles of Mechanics of Materials and Laws of Mechanics. Mechanics of Materials Laboratory gives the student basic tools for stress, strain and deformation analysis, methods for determining the stresses, strains and deformations produced by applied loads.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	**Demonstrate** basic engineering knowledge related to mechanics of material.	P4	01
2	**Perform** fatigue experiments to study relevant graphs (such as SN curve, load displacements curve etc.) with confidence and proficiency.	P5	01
3	**Conduct** experiments to find hardness number, impact strength and normal strength deflection.	P4	01

COURSE CONTENTS

Find Brinell hardness Experiment on a Specimen
Find Rockwell Hardness Experiment on a Specimen
Find Impact test strength of high carbon steel specimen
Find Impact test of Plastic specimen
Find compression test on a spring specimen on hydraulic universal testing machine
Find deflection of simply supported Brass beam
Find deflection of overhang Brass beam
Sketch and Perform fatigue test on a mild steel specimen
Sketch and Perform fatigue test on a brass specimen
Analysis of creep test on a nylon specimen
Analysis of creep test on a lead specimen
Analysis of thin walled cylinder experiment
Analysis of Universal Truss 1
Analysis of Universal Truss 2
Analysis of Universal Truss 3