



SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
LAB LESSON PLAN & PROGRESS
SESSION 2026-2027 (WINTER)
DEPARTMENT OF CIVIL ENGINEERING

Discipline: Civil Engineering	Semester: 3rd/Winter 2026	Name of the Faculty: Kuhudi Biswal Email: kuhudibiswal789@gmail.com
Subject: Mechanics of Materials Lab	No. of Days/week class: 04	Start Date: 01/07/2026 End Date: 05/11/2026

No. of Week	No. of Lab Classes	Topics to be Taught	Date of Delivery	
			G1	G2
1st	1st	Study and understand the use and components of Universal Testing Machine (UTM).		
	2nd	Study and understand the use and components of Universal Testing Machine (UTM).		
2nd	1st	Study and understand the use and components of Universal Testing Machine (UTM).		
	2nd	Perform Tension test on mild steel as per IS:432(1) and bend re bend test on mild steel		
3rd	1st	Perform Tension test on mild steel as per IS:432(1) and bend re bend test on mild steel		
	2nd	Perform Tension test on mild steel as per IS:432(1) and bend re bend test on mild steel		
4th	1st	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -re bend test on Tor Steel		
	2nd	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -re bend test on Tor Steel		
5th	1st	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -re bend test on Tor Steel		
	2nd	Conduct compression test on Concrete cube using Compression Testing Machine.		
6th	1st	Conduct compression test on Concrete cube using Compression Testing Machine.		
	2nd	Conduct compression test on Concrete cube using Compression Testing Machine.		
7th	1st	Conduct compression test on Concrete cube using Compression Testing Machine.		
	2nd	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/aluminum/ copper /cast iron etc. as per IS:1598.		
8th	1st	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/aluminum/ copper /cast iron etc. as per IS:1598.		
	2nd	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/aluminum/ copper /cast iron etc. as per IS:1757.		
9th	1st	Conduct Charpy Impact test on three metals. e.g. mild		

Kuhudi Biswal
11/6/26



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		steel/ brass/aluminum/ copper /cast iron etc. as per IS:1757.		
	2nd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.		
10th	1st	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.		
	2nd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.		
11th	1st	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077.		
	2nd	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077.		
12th	1st	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077.		
	2nd	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards		
13th	1st	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards		
	2nd	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards		
14th	1st	Abrasion test of floor tiles		
	2nd	Abrasion test of floor tiles		
15th	1st	Flexural test of floor tiles/roof tile		
	2nd	Flexural test of floor tiles/roof tile		


PREPARED BY


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VERIFY BY HOD
HOD
Civil Engg. Dept
SSE, Dhenkanal