

23CE21P1 SURVEYING LABORATORY

Course Category	Professional Core	Credits	1.5
Course Type	Practical	Lecture – Tutorial –Practical	0-0-3
Prerequisite	-	Sessional Evaluation	30
		Semester End Exam. Evaluation	70
		Total Marks	100

Course Objectives	1. Know about various linear and angular measuring instruments	
	2. Take Measurements in the linear and angular view	
	3. Determine the area and volume by interpreting the data obtained from surveying activities	
	4. Know modern equipment such as total station	
	5. Draft field notes from survey data	
Course Outcomes	CO1	Handle various linear and angular measuring instruments
	CO2	Measure the linear and angular measurements
	CO3	Calculate the area and volume by interpreting the data obtained from surveying activities
	CO4	Handle modern equipment such as total station
	CO5	Prepare field notes from survey data
Course Content	<p>List of Field Works:</p> <ol style="list-style-type: none"> Chain survey of road profile with offsets in case of road widening. Determination of distance between two inaccessible points by using compass. Plane table survey ;finding the area of a given boundary by the method of Radiation Height of the instrument method (differential leveling) Rise and fall method (Fly levelling) Determining the levels of contours Theodolite survey: finding the distance between two in accessible points. Theodolite survey: finding the height of far object. Theodolite survey: determining the horizontal and vertical angles by the method of repetition method Setting out a curve Determination of area of perimeter using total station. Determination of distance between two inaccessible point by using total station. 	
E-resources	https://sl-iitr.vlabs.ac.in/List%20of%20experiments.html	

CO-PO Mapping: 3-High Mapping, 2-Moderate Mapping, 1-Low Mapping, - -Not Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3
CO 1	-	1	-	-	-	-	-	-	-	-	1	-	-	1	-
CO 2	3	2	-	1	1	1	-	-	-	-	1	2	-	1	2
CO 3	3	2	-	1	-	-	-	-	-	-	-	1	1	1	2
CO 4	3	2	-	1	-	-	-	-	-	-	-	1	2	1	2
CO 5	2	1	-	2	3	2	1	-	-	-	3	2	1	-	1