

**II Year-I Semester
(20CE3201) Digital Surveying**

Int. Marks Ext. Marks Total Marks

15 35 50

L T P C

1 - 2 2

Pre- Requisites: Fundamentals of Surveying

List of Experiments

1. Theodolite Survey: Determining the Horizontal and Vertical Angles by the method of repetition method.
2. Theodolite Survey: Finding the distance between two inaccessible points.
3. Theodolite Survey: Finding the height of far object.
4. Tachometric survey: Heights and distance problems using tachometric principles.
5. One Exercise on Curve setting.
6. One Exercise on contours.
7. Total Station: Introduction to total station and practicing setting up, leveling up and elimination of parallax error.
8. Total Station: Determination of area using total station.
9. Total Station: Traversing
10. Total Station: Contouring
11. Total Station: Determination of Remote height.
12. Total Station: Determination of distance between two inaccessible points.

Note: Any 10 field work assignments must be completed.

Course Outcomes:

S.No	Course outcomes	BTL
1	To determine angles, Distance between two inaccessible points.	L4
2	To find heights & distances by application of tacheometric principles.	L4
3	To gain the knowledge of curve setting.	L2
4	To gain the knowledge of Contours.	L2
5	To determine length, area, Remote height, distance between inaccessible points by using Total Station.	L4

Correlation of COs with POs& PSOs:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	2	2	-	-	-	-	-	-	-	-	-	2	-	3	1
2	2	2	-	-	-	-	-	-	-	-	-	2	-	3	1
3	2	2	-	-	-	-	-	-	-	-	-	2	-	3	1
4	2	2	-	-	-	-	-	-	-	-	-	2	-	3	1
5	3	2	-	-	3	-	-	-	-	-	-	3	-	3	2