

## SURVEYING LAB

**Paper Code: ETCE-257**

**Paper: Surveying Lab**

<b>L</b>	<b>T/P</b>	<b>C</b>
<b>0</b>	<b>2</b>	<b>1</b>

**Based on theory courses ETCE 209 (10- 12 experiments)**

1. Linear measurement using tape, chain and tacheometric methods.
2. Levelling using Autolevel
3. Plotting of the area using radiation, intersection and linear measurement.
4. Solution to three point problem using Plane table.
5. Measurement of horizontal and vertical angles by Vernier Theodolite.
6. Measurement of horizontal and vertical angles using Electronic Theodolite.
7. Preparation of close traverse of about 1km periphery using Total Station.
8. Adjustment of close traverse.
9. Adjustment of angles of a given triangulation network.
10. Use of DGPS for drawing a map of roads covering an area of about 5 sq. kms.
11. Traverse computation using appropriate softwares like Autoplotter.
12. Computation of missing side/ angle of a polygon (triangle/ quadrilateral) and error estimation.
13. Laying out of simple curve.

**NOTE:- At least 8 Experiments out of the list must be done in the semester.**