

Survey Lab

The **Surveying Laboratory** is dedicated to the hands-on study and application of land measurement techniques, with a focus on accuracy and precision essential for civil engineering projects. The lab is equipped with modern instruments such as the *Total Station*, *Theodolite*, and *Electronic Distance Meter (EDM)*, enabling students to perform advanced fieldwork including traversing, leveling, and topographic surveys. Through practical sessions, students gain expertise in horizontal and vertical angle measurements, distance computations, and coordinate calculations. The lab also supports projects involving contour mapping and area computation. Final-year students are encouraged to undertake projects in this lab, particularly in the areas of *geodetic surveying*, *GPS-based applications*, and *automation in land measurement*.

LABORATORY DETAILS

Name of the laboratory	SURVEY LAB
Carpet area	122 m²
No. of machines or experiment setups	49
No. of experiments conducted	14

SPECIFICATION OF EQUIPMENTS/SETUPS AVAILABLE

Sl. No	Equipment
1	Total Station
2	Digital Planimeter
3	Mirror Stereoscope
4	Theodolite
5	Celestial Sphere
6	Dumpy Level
7	Engineers Tilting Level
8	Subtense Bar
9	Prismatic Compass
10	Penta Graph
11	Tangent Clinometer
12	Box Sextant
13	Levelling Staff
14	Abney Level
15	Optical Square
16	Chain
17	Steel Tape
18	Cross Staff
19	Ranging Rods
20	Mallet
21	Peg