

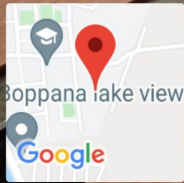
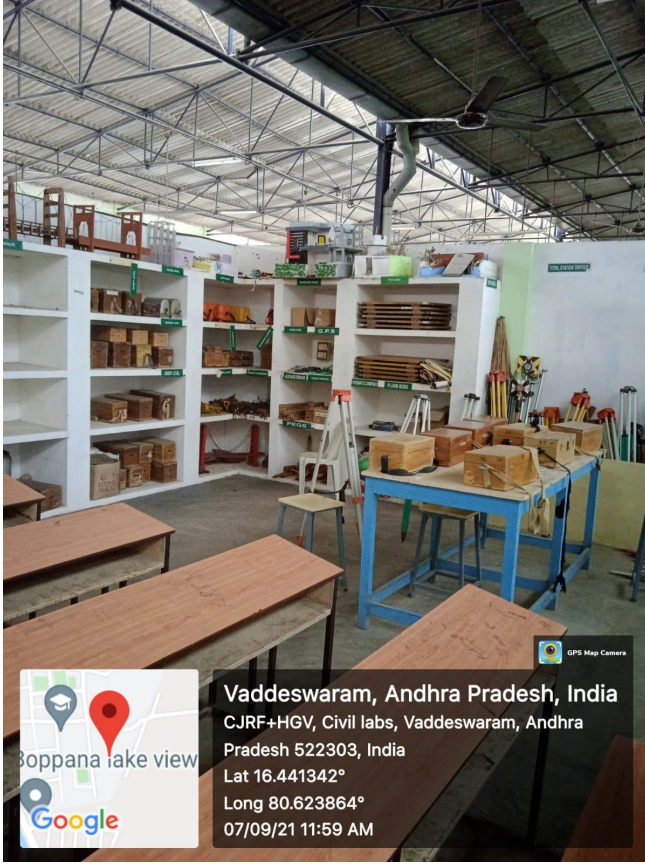
# **Surveying Lab**

**Lab In charge: Y. Himath Kumar**

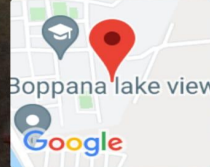
Surveying is a critical discipline in civil engineering, geomatics, and land surveying programs, serving as the foundation for accurate design, planning, and execution of construction and land development projects. A surveying lab provides a hands-on learning environment where students can apply theoretical principles to practical scenarios, mastering the art and science of measuring and mapping the Earth's surface. This introduction to a surveying lab outlines its objectives, importance, and the skills students are expected to acquire through their participation.

## **List of Experiments**

1. Determination of area of a polygon by a ranging and taking offsets.
2. Measuring distance between two stations by indirect ranging when they are obstacles.
3. Measuring of bearing of sides of the traverse and preparation of map.
4. Determination of elevation of various points with a level by collimation method
5. Determination of elevation of various points with a level by rise & fall method.
6. Calculation of volume of earthwork using Total Station
7. Measurement of horizontal angles and height of building using Total Station
8. Location of points in an area using Total Station.
9. Two Exercises on Contouring



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