



POORNIMA UNIVERSITY

Report

On

Total Station Workshop (22.04.2015 - 23.04.2015)

Department of Civil Engineering

The department of Civil Engineering organized a two days workshop on surveying equipment **Total Station** for 2nd year students of Civil Engineering successfully from 22.04.2015 - 23.04.2015. This workshop provided the opportunity to the students to use Total Station. A total station or TST (total station theodolite) is an electronic/optical instrument used in modern surveying and building construction. The total station is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point. Robotic total stations allow the operator to control the instrument from a distance via remote control. This eliminates the need for an assistant staff member as the operator holds the reflector and controls the total station from the observed point.

The following are some of the major advantages of using total station over the conventional surveying instruments:

1. Field work is carried out very fast.
2. Accuracy of measurement is high.
3. Manual errors involved in reading and recording are eliminated.
4. Calculation of coordinates is very fast and accurate. Even corrections for temperature and pressure are automatically made.
5. Computers can be employed for map making and plotting contour and cross-sections. Contour intervals and scales can be changed in no time.

For workshop students were divided into groups (10 students per group) and each group performed the task to use total station in the ground of University campus. After practical work students learned to conclude all the practical work in a map using Auto Plotter and Auto CAD.

Overall the workshop was technically and practically sound and the long term expected result is to make students which will help them in building the path of their carrier.



