

Total Station & GIS

Topics Covered

Lecture session

- Study of surveying methods and instruments
- Concepts of surveying and data collection using Total Station
- Theory of errors in observations
- Fundamental Concepts of GIS
- GIS Data Models
- Coordinate System and Maps Projections
- Introduction to GPS

Practical Session

- Total Station Initial Settings
- Setup station
- Setting up back sight and Traverse
- Topographic survey
- Construction stake out
- Area and volume Calculation
- Generating a map of site using survey data
- Prepare a topographic Data Base of the site
- Geo-referencing aerial imagery and scanned maps
- Digitizing
- Raster Styling and Analysis