



Training Programme on Modern Land Surveying Techniques

05 - 09 October 2026



Organized by
Department of Geography, School of Earth Sciences
Central University of Tamil Nadu, Thiruvavur

About the Training Programme

In the world of modern land surveying techniques, three remarkable technologies stand out: Total Station, DGNSS (Differential Global Navigation Satellite System) and Drone. These technologies play pivotal roles in capturing accurate spatial data, enabling precise measurements, and revolutionizing the way we model our environment. Total Station is a multifaceted instrument that combines an electronic theodolite with an electronic distance measurement (EDM) system. Its roles are far-reaching, like angle and distance measurement, data collection, and Integration with CAD and GIS. DGNSS powered by constellations like GPS, GLONASS, and other, offers positioning and navigation capabilities with unparalleled horizontal/vertical accuracy. Drones are widely used with advanced cameras to capture the spatial arrangement, measure the morphometry and derive terrain products. The combination of these technologies offers a formidable toolbox for professionals in surveying, engineering, construction, geospatial and environmental sciences. This five-day training programme covers these technologies and empower the trainees with skills to setting up, capture, measure, analyse, and utilize surveyed data for preparing project reports and decision-making.

Programme Outline

- Setting up the total station - Levelling and resection
- Angle/distance measurement & Area/volume calculation
- Traversing survey method
- Map projections and coordinate systems
- Capture spatial data from drone images
- Overview of GNSS and differential GNSS
- Static & Real Time Kinematic (RTK) survey methods
- Post-processing of total station, DGNSS & drone data
- Compare the survey products & designing the projects
- Build a professional network

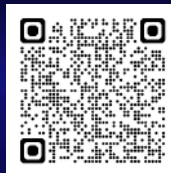
Targeted Participants

This workshop is open to master's students, research scholars, academicians, and professionals seeking exposure and learning in the field of modern land surveying. A maximum of **20 participants** will be selected on first-come, first-served basis. There is no travel allowance to attend the workshop.

How to Register?

Registration Link:
<https://forms.gle/FD7ufF4zVYVFYemqZ>

Last Date to Register:
25th September 2026



Registration Fee **Rs. 1,770/-**
(incl. GST)

Accommodation Fee **Rs. 2,500/-**
(optional)
(shared accommodation and food in the guest house for 5 days)

Please note that the fee paid is non-refundable

About the Organizing Department

The Department of Geography at CUTN was established in 2017 with a vision to become a leading geography department in the country. The department is recognised with a DST-FIST grant and has received research grants from leading funding agencies in India. The department currently offers a four-year B.Sc. Geography (Honours) program with a sanctioned intake of 21, a M.Sc. Geography program with a sanctioned intake of 19, and a PhD program in Geography, focusing on areas such as physical, human, and environmental geography, as well as geospatial technologies. The department has well-equipped GIS, Image Processing, Survey, Cartography, Demography, Advanced Geospatial, Applied Geomorphology, and Urban Research labs.

How to reach CUTN? <https://cutn.ac.in/how-to-reach-cutn/>

geocutn@gmail.com

Central University of TamilNadu
Neelakudi, Thiruvavur - 610005

Dr. Arun Prasad K. - 9847929228
Dr. D. Surendran - 7708877846