

ADICHUNCHANAGIRI INSTITUTE OF TECHNOLOGY



Estd: 1980

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on

ADVANCED TOOLS IN SURVEYING

23/05/2022 to 25/05/2022

Co-ordinators

- Mr. KAVAN M.R
- Mr. NAVEEN KUMAR S M
- Mr. GOUTHAM D .R

Assistant Professor, Department of Civil Engineering, AIT, Chikkamagalur.

Title: Advanced Tools in Surveying

Duration: 30 hrs

Dr. M. RAME GOWDA

B.E., M.Tech., (IT-B), Ph.D. (NITK)

Professor and Head

Department of Civil Engineering

Adichunchanagiri Institute of Technology

CHIKKAMAGALURU-577102

SYLLABUS

1. ADVANCED TOOLS IN SURVEYING -10 HRS

Measuring distances, introduction of conventional and advanced equipment. GPS working mechanism, case study of GPS in Mysuru city, ward maps and control points, total population distribution, errors and future of GPS, application of GPS.

Outcome of the Session:

Working Knowledge on Advances Surveying Equipments, GIS and GPS or engineering experience is highly recommended for Civil Engineering field.

Mr. NAVEEN KUMAR S.M.

2. Practical Session on Advanced Tools in Surveying applications in Civil Engineering- 10 hrs

- Introduction to Total Station, coordinate system.
- Land survey using total station & GPS.
- Block Levelling using Total Station.
- Area Mapping.

Outcome of the Session:

Students become familiar in the Total Station and its application.

Mr. KAVAN M.R.


3. E Surveying software and its Applications -10 hrs

- Live sessions on importing the excel data from the instrument to the E-Surveying Software.
- Drawing of contour lines, importance of radius line and understanding of the contour lines drawn in the software.
- Demonstration on plotting of cross section, longitudinal section, key plan for various projects such as canal alignment, highway alignment, new tank project etc.
- Calculation of earthwork and fixing up of gradients and curves of the highway alignment.

Outcome of the Session:

Students learnt to use of the E-Surveying software tool to plot various drawings related to field surveying.

Mr. GOUTHAM D.R.


Dr. M. RAME GOWDA
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