



THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF WATER

WATER INSTITUTE SINGIDA



SHORT COURSE TRAINING

WATER INSTITUTE SINGIDA BRANCH ANNOUNCES SHORT COURSES ON:

➔ **1. GIS AND REMOTE SENSING APPLICATIONS FOR WATER AND ENVIRONMENTAL MANAGEMENT.**

1st week: **BASIC GIS.**

TSh. 400,000/= from 7/9/2020 to 11/09/2020. (For beginners).

Contents:

- Introduction to GIS and GIS software
- Spatial data and data management
- Georeferencing systems
- Spatial data models and Spatial database management
- Spatial data input and manipulation
- Creating and Exporting Maps, transformation and editing.
- Spatial analysis and modelling, Spatial query and reclassification, Overlay analysis and map algebra and Spatial interpolation
- Measures of spatial distributions, Analysis of spatial patterns, Detection of spatial clusters and Modelling of spatial relationships
- Water quality mapping with GIS
- Water supply planning with GIS

2nd Week: **REMOTE SENSING AND DATA ANALYSIS.**

TSh. 400,000/= from 14/9/2020 to 18/9/2020. (For anyone who already have a basic knowledge of GIS)

Contents:

- Nature of remote sensing data
- Remote Sensing data Download
- Image preprocessing, enhancement, transformation and classification
- Digital terrain analysis and terrain models (DTM and DEM)
- Hydrologically correct DEMs
- Terrain attributes and Visibility analysis
- Spatial decision analysis and modelling
- Field Applications of Remote Sensing (ie. Land use and land cover analysis)

NOTE: For anyone interested with Basic GIS, Remote Sensing and Data analysis will receive a discount of 25%

➔ **2. PLUMBING AND PIPE FITTINGS.**

TSh. 400,000/= from 21/9/2020 to 25/9/2020. (There will be field and Workshop visit for all participants).

Contents:

- ❖ Pipe sizing for cold and hot water installation
- ❖ Pipe materials
- ❖ Pipe joining techniques
- ❖ Emergency repair
- ❖ Water economy

NOTE: ALL PARTICIPANTS WILL BE AWARDED CERTIFICATES OF ATTENDANCE

All participants should send confirmation not later than one week before the training start date.

The Water Institute Singida is located in the Internal Drainage Basin Water Board Buildings Room No 07 Ground Floor. It is also near to SUWASA, Just 100m off Namfua football ground in Singida Town.

Contact the Coordinator by: **0755900905** or **0739900907**, P.O.Box 1673 Singida, Email: singidabranch@waterinstitute.ac.tz