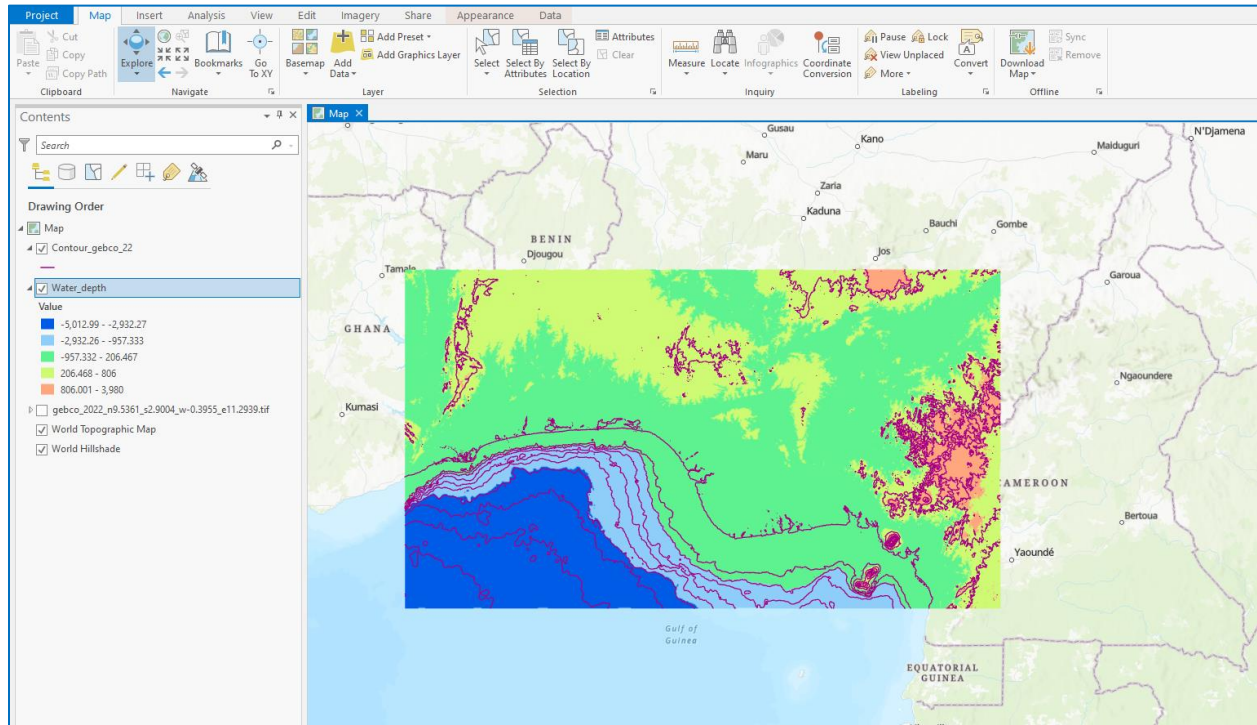




GE073: ArcGIS Water Mapping Software

Training Description:

Water Distribution Data Management can be used to map water distribution assets, edit data, view system maps in the field and office, view asset reports, and collaborate with map notes.

It turns ArcGIS into a system for water distribution organizations to easily inventory their assets and keep information up to date. It provides simple to use interactive system maps and dashboards for office and field staff, and increases collaboration.

After deploying, organizations with no water distribution data can immediately begin mapping their water distribution systems using GPS or digitizing data with web or desktop software. Organizations with existing spatial water distribution data can load it and begin using the apps.

This training course is focused on how to use ArcGIS Pro to create hydro maps. The training course will first introduce the mapping essentials of ArcGIS Pro including uploading GIS data, data projection, and map styling. Afterward, the course will cover the essentials of watershed delineation including Contour lines, DEMs, flows, and streams. The last part of the course will focus on an example on how to start with a DEM file to delineate a watershed. This training course requires the attendees to have a license for ArcGIS Pro Advanced with Spatial Analysis Extension. In addition, ArcGIS Pro should be installed on each delegate's workstation.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Upload data into ArcGIS Pro
- ✓ Manage projections in ArcGIS Pro
- ✓ Style data in ArcGIS Pro
- ✓ Understand the various concepts of watershed delineation

Training Designed for:

This course is intended for those interested in learning ArcGIS Pro for hydro mapping.

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

FIVE DAYS:

- ❖ Introduction
- ❖ What is ArcGIS?
 - Who is ESRI?
 - ArcGIS Suite
 - ArcGIS Pro within the Suite

- ArcGIS Online (AGOL) within the Suite
- How is AGOL Related to ArcGIS Pro?
- ❖ **GIS Data Models**
 - Vector data model
 - Points
 - Lines
 - Polygons
 - Raster data model
- ❖ **ArcGIS Pro Interface**
 - Project Tab
 - Map Tab
 - Insert Tab
 - Analysis Tab
 - View Tab
 - Edit Tab
 - Imagery Tab
 - Share Tab
- ❖ **Map Projection**
 - What is map projection?
 - Geographic Vs. Projected
 - Transform map projection
- ❖ **Uploading Data in ArcGIS Pro**
 - Folder connection
 - Accepted Formats for ArcGIS Pro
 - Data Preparation
 - Uploading Data
 - Reviewing Uploaded Data
 - View attributes
 - What is a File GDB?
 - What is a Feature Layer?
 - Credits for Analysis
- ❖ **Creating Empty Feature Layers in ArcGIS Pro**
 - Create empty feature layer
 - Add new features to a feature layer
- ❖ **Styling Layers in Maps**
 - Data Symbology
 - Labeling Data
 - Customizing Popups
 - Creating Bookmarks
 - Visible Range Settings
- ❖ **Filtering data**
 - Filtering by attributes
 - What is Python?
 - What is Arcade?

- Select by location
- ❖ **Spatial Analysis Tools**
 - What is Spatial Analysis?
 - Toolboxes
 - Licensing of tools
 - Buffer Tool
 - Summarize Within Tool
- ❖ **Hydrology Toolset**
 - Spatial Analyst Toolbox
 - Hydrology Toolset
 - Contour Lines
 - DEMs
 - Create DEMs from contours
 - Fill sinks
 - Flow direction
 - Flow accumulation
 - Watershed Delineation
- ❖ **Watershed Delineation Exercise**
 - Explore dataset
 - Prepare dataset
 - Fill sinks
 - Create flow direction
 - Create flow accumulation
 - Delineate a watershed
- ❖ **Using Model Builder Instead**
 - What is model builder?
 - Create input
 - Link tools
 - Input and output
 - Validate model
 - Run model
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

Aisha Relativo - Training & Career Development Manager

aisha@cmc-me.com / training@cmc-me.com

Tel.: +971 2 665 3945 or +971 2 643 6653 | Mob.: +971 52 2954615