ArcGIS Online Training Program

The session will be delivered by the working professional in their respective domain & it will be purely **hands-on practical sessions**.

Modules

1 - INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS

- Introduction.
- Definition and basic concepts.
- Uses of Geographic Information Systems.
- Geographic information: vector data models, raster data models and other data models (CAD, TIN, etc.).
- Introduction to ArcGIS Desktop: ArcMap, ArCatalog, ArcToolbox, ArcScene and ArcGlobe.
- Arcmap interface, extensions and tools.

2 - VECTOR DATA MODEL. INFORMATION DISPLAY.

- Information layers: how to add layers, features and attribute tables.
- Data tools: search and queries.
- Selection tools: selection per feature, selection by spatial location and capture information.
- Layer symbology: basic symbology, by category, by quantity and through graphics.
- Other display options: labelling and transparencies.

3 - COORDINATE SYSTEMS, PROJECTIONS AND GEOREFERENCING.

- Introduction to Coordinate systems and projections.
- Defining Coordinate Systems.
- Coordinate system transformation. Reprojection of ED50 or ETRS89 geographic databases.
- Image, layer and CAD files georeferencing.

4 - VECTOR DATA MODEL.

Creation and editing of spatial data.

- Creating of spatial data: Editing tools bar. Digitization techniques.
- Exporting and importing spatial information files from different formats (CAD, DGN, 0 Shp, ASCII, etc.). Create layers from CAD files.
- Modifying existing layers.
- Creating layers from coordinates.

Creation and editing of data in Attribute tables:

- Structure of an Attribute table.
- Types of data included in an attribute table.

- Modify information from an attribute table
- Calculate geometric information (Surface, perimeter, length, etc.).
- Creation of statistics from an Attribute table
- Export tables to Excel and other formats. Report and graph creation.

5 - DATABASE MANAGEMENT

- Introduction to Coordinate systems and projections.
- Defining Coordinate Systems.
- Coordinate system transformation. Reprojection of ED50 or ETRS89 geographic databases.
- Image, layer and CAD files georeferencing.

6 - SPATIAL ANALYSIS.

- Extract Toolset (Clip, Split).
- Overlay toolset (intersect, union).
- Proximity toolset (buffer analysis, Thiessen polygons).
- Multi-criteria analysis. Obtaining optimum areas according to several criteria.

7 - MAP CREATION.

- Adjusting the size and type of sheet.
- Inserting elements: north, scale bar, numeric scale, map legend.
- Including other elements: images, graphs and tables.
- Adding several data frameworks
- Creation and use of templates.
- Printing options