

# GIS (GEOGRAPHIC INFORMATION SYSTEM): DATA ACQUISITION AND PROCESSING TECHNIQUES

 **Dates and duration to be agreed**

 **Location to be agreed**

Contact us for a customised quote



## OBJECTIVES

- Master the main notions of mapping.
- Know the GIS data acquisition and processing methods and techniques.
- Measure the usefulness and constraints of a GIS on projects.



## THE + OF YOUR TRAINING

- - The GIS software used throughout the training session will be chosen in accordance with the practices and requirements of the department.
- Depending on the client's request, training comprising a field mapping section may be considered: mobile GPS and GIS in the field with various hardware devices and software.



## CONCERNED AUDIENCE

- GIS and IT departments
- Operational departments using GIS



## GOOD TO KNOW

- This training session will be mainly organised around practical computer work.
- Exemple de programme réalisable en 5 jours



## PEDAGOGICAL PROGRAMME

### Module 1

#### Main notions of mapping

- Presenting GIS.
- Satellite images at the service of thematic mapping.
- New 3D digital terrain model techniques (Lidar).
- GPS for terrain mapping.
- Geodetic systems, geographic and cartographic coordinates, projections.

### Module 2

#### Data acquisition techniques

- Overview of office, mobile and web-based GIS software (features, tariffs, etc.).
- Functions and applications of GIS in the chosen topic.
- Various methods of acquiring data: vector data, raster data, using various types of GPS and integrating data into the GIS.
- Organising and managing spatial data.
- Data representation, producing a map and using a virtual globe to represent data.

### Module 3

#### Data processing techniques

- Displaying and updating data.
- Manipulating and managing tables, joins, and relationships between the tables.
- Interrogating and manipulating georeferenced data.
- Selections and queries.
- Overview of geoprocessing tools.
- Presenting data and editing maps.
- Managing metadata in accordance with the GIS software used.



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**Prerequisites :** Have held or currently hold a position related to the training theme