



# 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



- 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 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 bardware devices and coffware.



- GIS and IT departments
  Operationnal deptarments using GIS



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



## 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.

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#### Module 2

**Data acquisition** techniques

Overview of office, mobile and webbased 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

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