

QGIS Open-source Desktop GIS software

Initiation and advanced

OBJECTIVES

This training allows you to create, edit, view and publish Geographic Information under QGIS. At the end of this internship, participants will be able to:

- Understand the fundamentals of Geographic Information
- Administrate, represent and organize GIS datasets
- Integrate external databases by joins to make graphic selections and SQL queries
- Set up thematic analysis by range of values, proportional symbols
- Work on raster-type data and digital terrain model (MNT) to extract level curves
- Create terrain profil, hillshade, slope map
- Perform geoprocessing (cutting, intersection, union)
- Advanced layers symbology and rules
- Getting started with QGIS toolbox



BACKGROUND

Basics in computing science and IT technologies.



PUBLIC

Everyone who wants to master QGIS, handle, organize, represent and analyze cartographic datasets.



NUMBER OF TRAINEES

✓ On site= 10 people



DURATION

> 5 days



ORGANIZATION

Types of training

- ✓ Individual (France)
- ✓ On site in your country

Certificate training

> Yes

Loan of temporary software licence

> Yes



REGISTRATION

By e-mail: contact@maptogis.com

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TRAINING CONTENTS

REMINDERS ON GIS AND GEOGRAPHICAL INFORMATION (GI)

- The Geographical Information
- Coordinate systems, projections, Vector, Raster data, webservice
- Data suppliers & GIS applications

GETTING STARTED WITH QGIS

- QGIS: general description and preference tools
- Data connection, graphic selection, attribute and statistical data, bookmarks, measure a distance or an area, save a project

REPRESENTATION AND PUBLICATION OF GIS DATASETS

- Graphic semiology, Labels
- Thematic analysis
- Build a map composition with Map Composer, print and export a map

JOINS AND DATA INTERROGATION

- Database joins and SQL query
- Data export

DATA CREATION (DIGITALIZATION)

- Create a Vector layer (shapefile format)
- Draw new geometries in a layer (drawing tools, points, lines, polygons)
- Update attribute datasets

RASTER AND DEM DATA MANAGEMENT WITH QGIS

- Georeference a Raster
- Create a terrain map
- Extract contour lines, hillshade and slope map
- Clip a Raster

SPATIAL ANALYSIS WITH QGIS QUERIES AND SQL SELECTIONS

- Create a buffer area, intersection, clipping of layers
- Group of geometries and attributes

ADVANCED LAYERS SYMBOLOGY WITH QGIS

- Symbol import
- Display layers at your scale
- Symbol levels / Labels with display conditions / rules

QGIS TOOLBOX

- Getting started with QGIS toolbox
- Advanced spatial analysis
- Getting started with QGIS ETL (modelling) / Algorithm
- Conception of data treatment model

