QGIS open-source desktop GIS
level 1 - Initiation

PEDAGOGICAL OBJECTIVES

Create, edit, visualize and publish geographic information in QGIS.

At the end of the course, participants will be able to:

1. Understanding the fundamentals of Geographic Information
2. Manage and represent GIS data
3. Make selections by SQL queries
4. Set up thematic analyses
5. Perform geoprocessing
6. Exploit a digital terrain model (extraction of contour lines, calculation of slopes)

TARGET AUDIENCE
All audiences

PREREQUISITES
Have a foundation in computer science

TEACHING RESOURCES
Provision of a software license: yes

Pedagogical support in digital format given to the trainee (with concrete examples and practical exercises)

Evaluation questionnaire and certificate of completion of training

DURATION   > 3 days. (21hours of training)

RATES   > On quote

TERMS AND CONDITIONS
No pre-requisite selection
Dates to be agreed

REGISTRATIONS
Email.   > formation@arxit.com
Tel.   > +33 (0)5 46 34 07 71

For the accessibility of people with disabilities, contact us.

CONTENT

THEORETICAL REMINDER ON GIS
Geographic Information

The different types of projection

Vector and Raster data models

Gestion and acquisition, data restitution, metadata

GETTING STARTED WITH THE SOFTWARE
Description of QGIS (interface, preferences)
Consulting the data
Using bookmarks and measurement tools

GIS DATA REPRESENTATION
Graphic semiology
Symbology and labels
Thematic analyses
Map printing and export / Atlas

QUERYING GIS DATA
Select attribute by SQL query
Advanced data consultation
Joins on external file (xls, ...)
Export GIS data

DATA CREATION (DIGITIZATION)
Creating a Shapefile Vector Layer
Adding objects to a saved layer
Updating attribute data

RASTER DATA MANAGEMENT
Georeference a Raster image
Terrain analysis based on DEM/DTM
Extract contour lines
Shade Map / Slope Map
Clipping Raster

INTRODUCTION TO SPATIAL ANALYSIS
Project based exercises:
Create a buffer zone
Layer overlapping