

# ArcGIS for Desktop

## Desktop GIS software – Initiation and Advanced

### OBJECTIVES

This training allows you to create, edit, view and publish geographic information under ArcGIS For Desktop. 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 join 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 (DTM)
- Work with geodatabase
- Perform geoprocessing (cutting, intersection, union)
- Advanced layers symbology and rules, layout and atlas (automatic cartographic) production
- Getting started with ArcGIS Model Builder

### PUBLIC

Everyone who wants to master ArcGIS for desktop, handle, organize, represent and analyze cartographic datasets.

### BACKGROUND

Basics in computing science and IT technologies.

### ORGANISATION

**Duration:** 5 days

**Number of trainees:**

On site = 10 people

**Types of training:**

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

**Location:**

- Individual: La Rochelle France
- On site: to be defined

**Training certificate:** yes

**Loan of a temporary software license:**  
yes

### 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 ArcGIS

- ArcGIS: 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 layout, 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 data management

- Raster georeferencing
- Ground control points (GCP)
- The new raster tool bar "image analysis" of ArcGIS for Desktop

#### Advanced Geodatabase

- Notion of spatial reference
- Structure your geodatabase
- Create and manage a file or personal geodatabase
- Domains and subtypes in a geodatabase (automation / combination)
- Import / export structure of a geodatabase
- Raster data storage within a geodatabase

#### Advanced layout

- Advanced ATLAS/ dynamic pages

#### The Model Builder

- Automation of tasks and spatial analysis



**AUTHORIZED**  
Training Center

