

## Introduction to QGIS Desktop GIS

2 day Course



### Pre-requisites

Attendees should have basic IT knowledge, but prior knowledge of GIS is not necessary.

### Who Should Attend?

Those who are either new to GIS or those who already have some experience of using GIS software and now wish to utilise an Open Source GIS system.

### Objectives

This two-day intensive course introduces the core functionality of QGIS, taking you through all the tools you will need to get started with the software. QGIS is a free desktop GIS, providing the same GIS functionality as commercial desktop GIS solutions such as MapInfo or ArcGIS for Desktop.

The course is delivered using instructor-led real world examples where you learn by 'doing'.

The course covers topics including, getting started with QGIS, map navigation and general mapping tips, selecting and querying your data, applying symbology, data analysis and editing, accessing external data sources and cartographic output.

### Benefits of your course

- Experienced Open Source GIS trainer
- Hands-on training exercises
- One PC per delegate
- All course software and comprehensive training materials provided
- Lunch and refreshments
- Certificate on course completion
- 30 days post training support
- Course Agenda can be tailored for bespoke courses

## Agenda

### Day One:

#### Introduction to Open Source GIS

- Open Source
- Open Data
- Open Standards

#### Getting Started

- Understanding the User Interface
- Creating a QGIS Project
- Adding GIS datasets -
- **Data Source Manager and GeoPackage Layers – New in V3**
- Navigating the Map

#### Working with Layers

- Layer Properties; Visibility, Translucency, Styling and Grouping Layers
- Map Labels
- Identify and Measure Tools
- **Synchronise Map Windows – New in V3**

#### Selecting and Querying Data

- Query Builder
- Select by Attribute
- Select using Wildcards
- Select from the Map
- Select by Location (Spatial queries)

#### Symbolising Data

- Graduated and Categorized Point Symbols
- Graduated and Categorized Polygon Styling
- Thematic Joins

### Day Two:

#### Data Creation and Editing

- Edit Feature Attributes
- **Auto Update Date Edited – New in V3**
- Using the Field Calculator
- Geocoding CSV Data
- Reshape and Create new GIS Layers

#### Geometry and Geoprocessing Tools

- Convert Lines to Polygons
- Multipart and Singlepart geometry
- Simplify
- Extract Nodes
- Buffers – **Data Defined New in V3**
- Dissolve, Intersect and Difference

#### Opening Data from other Data Sources

- Web Mapping Services (WMS)
- Web Feature Services (WFS)
- Loading Raster Datasets
- Georeferencing Raster Images
- Loading PostGIS Data

#### Working with QGIS Plugins

- OpenLayers / Adding Tile Services
- Multiring Buffers
- GeoCoding

#### Printing and Publishing

- Map Export
- **Using the Print Layout and adding map elements – New in V3**

## Accreditation

Completing this course allows you to collect **8 AGI CPD** points towards your professional development

