



# Practical Open Source GIS

## Course Outline

The course has been designed for participants to develop their skills using the Open Source Geographic Information System (GIS) software package Quantum GIS (QGIS) as a more cost-effective alternative to using commercially available GIS packages such as ArcGIS and MapInfo.

The courses are being run at a large number of locations around the UK in order to make it as easy as possible to access and benefit from the training regardless of where you are based.

The particular GIS skills you will learn have been carefully selected by the Tutor, a working ecologist for over eleven years, so that you will be able use QGIS independently after completing the course to carry out the most useful and common GIS tasks. More advanced techniques and unnecessary detail will be avoided and emphasis will be placed on foundation skills which are often overlooked but are fundamental to the ability to be able to successfully use QGIS independently.

The course focuses on developing hands-on practical GIS skills through individual computer-based practical sessions. An overview of the skills you will be using and developing in each computer-based practical session will be given beforehand through demonstration by the tutor. You will then consolidate these skills by undertaking the subsequent computer practical session whilst being carefully assisted step-by-step by the tutor. The carefully structured computer practical sessions will be further aided by the comprehensive course workbook which sets out each exercise clearly step-by-step both in text and graphically. The course workbook will form a valuable source of reference following completion of the training.

## **Tutor: Tim Smith BSc (Hons.) MCIEEM**

Tim has used QGIS, ArcView, ArcGIS and MapInfo throughout his career for research, conservation and ecological consultancy. His higher level GIS expertise has been used for tasks such as rationalising GIS datasets for English Nature and creating a GIS inventory of wetlands across Wales for Countryside Council for Wales. Tim has also undertaken soil and topographic surveys on a number of internationally important wetlands across the UK using a Trimble R8 Virtual Reference Station (VRS) and produced terrain maps and models in ArcGIS using these field data.

Tim now mainly uses GIS for habitat mapping and analyses of Phase I and Phase II survey data using overlays of development plans in GIS to enable more effective identification of ecological constraints and mitigation design. He is keen to inspire and promote the use of GIS more widely, particularly in ecological consultancy.

You can find further information on Tim's background [here](#)



## **Course Requirements**

This course has been designed for participants with little or no previous experience of GIS. To participate in the course you will require a reasonable level of IT literacy and a moderately well powered laptop (with WiFi) running Windows operating system and pre-loaded with QGIS 2.8 Long Term Release (for corporate users) which can be downloaded from [here](#)

## **Aims and Objectives**

- To enable participants to develop practical skills in QGIS for more robust ecological decision-making and best practice purposes;
- To explain the importance of the application of GIS in ecological decision-making;
- To enable participants to become familiar with the main functionality of QGIS;
- To teach participants simple techniques to enable them to build, manage and analyse ecological datasets; and
- To teach participants how to produce map layouts for inclusion in reports.

## Learning Outcomes

- An understanding of the importance of ecological decision-making being based on spatially accurate ecological data through the application of GIS;
- Project setup;
- Setting geographical co-ordinates for your data frame (georeferencing);
- Adding Raster and Vector data to your Project;
- Managing Raster and Vector data;
- Creating and editing spatial data;
- Getting to know your way around QGIS;
- Looking at data at different scales;
- Symbology; and
- Techniques to produce map layouts for inclusion in reports using Print Composer.



## Further Details, Booking and Cost

The fee for the course per delegate is **£234** inclusive of VAT and includes:

- Lunch;
- Refreshments throughout the day;
- Course workbook;
- Course completion certificate; and
- Technical support shortly after the course for any queries relating to material covered.

Please download a [Booking Form \(docx, 82 K\)](#), complete and return together with your payment to secure your place.

Early booking is advised as numbers on all the courses are limited to a maximum of six to eight delegates to allow an appropriate level of tuition. If there are more than six to eight delegates, a second course may be run, dependant on numbers.

Call Tim Smith directly on 01453 759306 M: 07732 397984 if you have any queries or [email us](#).

## Venues and Locations

Courses are being held at the following venues and locations near you. Each course runs from 09:30hrs to 16:30hrs.

**Exeter - 26 November 2015** at Jurys Inn, Western Way, Exeter, EX1 2DB. Please click [here](#) for further details on this venue.

**Southampton - 02 December 2015** at Jurys Inn, Charlotte Place, Southampton, SO14 0TB. Please click [here](#) for further details on this venue.

**Manchester - 08 December 2015** at Park Inn by Radisson Manchester City Centre, Cheetham Hill Road, M4 4EW. Please click [here](#) for further details on this venue.

**Newcastle - 09 December 2015** at Jurys Inn, Scottswood Road, Newcastle, NE1 4AD. Please click [here](#) for further details on this venue.

**Glasgow - 10 December 2015** at Jurys Inn, 80 Jamaica Street, Glasgow, G1 4QG. Please click [here](#) for more details on this venue.

**London (Croydon) - 12 January 2016** at Jurys Inn, Wellesley Road, Croydon, CR0 9XY. This venue is approximately 15 minutes by (fast) train from central London (Victoria). Please click [here](#) for more details on this venue.

**Maidstone - 14 January 2016.** Venue to be confirmed.

**Cambridge - 10 February 2016** at The Gonville Hotel, Gonville Place, Cambridge, CB1 1LY. Please click [here](#) for more details on this venue.

**Oxford - 17 February 2016.** Venue to be confirmed.

**Stroud - 01 March 2016** at The Exchange, Brick Row, Stroud, Gloucestershire GL5 1DF. Please click [here](#) for more details on this venue.

**Bristol 15 March 2016** at Hilton Bristol, Woodlands Lane, Bradley Stoke, Bristol, BS32 4JF. Please click [here](#) for more details on this venue.

**Birmingham - 22 March 2016** at Jurys Inn, 245 Broad Street, Birmingham, B1 2HQ. Please click [here](#) for more details on this venue.

Details on venues which are still to be confirmed will be uploaded in due course to [www.fivevalleysecology.co.uk/training](http://www.fivevalleysecology.co.uk/training).

Details on the itinerary can also be found in our advertisement in the October editions of British Wildlife and CJS Professional (or CJS Weekly).