GeoData

Advanced MapInfo Professional

COURSE OUTLINE

This course builds on the delegate's existing knowledge of the underlying principles and methods of Geographical Information Systems (GIS). It comprises a series of presentations and computer-based practical sessions using MapInfo Professional software with example date sets taken from a variety of fields. The basic functionality of MapInfo Professional is expanded upon. Topics covered include: introduction to GIS customization with MapBasic; expressions and functions; advanced queries; data capture and QA; spatial analysis; advanced use of workspaces; using remote data; advanced data display and output; and resources and utilities.

This course is intended for those who have completed our Introduction to MapInfo Professional course or have equivalent knowledge and experience.

By attending training with GeoData you can accrue CPD points towards the Chartered Geographer accreditation.
This course has been validated under the Association for Geographic Information CPD Scheme and it has been assessed for Royal Geography Society with IBG (RGS-IBG) Chartered Geographer (CGeog) accreditation (10 hours of CPD points).

ANTICIPATED COURSE OUTCOMES / ACHIEVEMENTS

Aims and objectives

- To develop delegates' understanding of the fundamental concepts of GIS including its strengths and limitations.
- To widen delegate's experience beyond the core functionality of the MapInfo Professional software package.
- To expand on the skills needed to obtain, import, manipulate, analyse, interpret, manage and output spatial data in order to investigate topics in the delegate's area of interest.
- To demonstrate more advanced real-world uses of GIS.

Learning outcomes - by the end of the course, delegates will have a knowledge and understanding of:

- MapBasic syntax
- Expression building and use
- Basic MapInfo automation using MapBasic window and workspace
- Using remote spatial data sources (spatial databases & internet data sources)
- Bundled and third party tools
- Advanced geoprocessing
- Advanced SQL
- Advanced data display and output

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Day 1

1 - Introduction to MapBasic

MapBasic window
Documentation

2 - Expressions & functions

String expressions
Numeric expressions
Spatial expressions
Functions
Applications of expressions

Exercise 2: Using expressions

3 - Advanced Queries

Textual joins
Spatial joins
Sub selects
Optimising queries

Exercise 3: Advanced Queries

4 – Spatial Analysis

Overlay
Reclassification
Spatial Statistics
Redistricting

Exercise 4: Spatial Analysis

5 - Workspaces

Editing Workspaces
Using workspaces as scripts

Exercise 5: Batch Processing

Day 2

6 – Using Remote Data

ODBC Sources
Spatial databases
Internet data sources

Exercise 6: Using Databases

7 – Advanced Data Display & Output

Advanced thematic mapping
Hotlinking
HTML Image maps
Layered PDF export

Exercise 7: Display techniques

8 – Coordinate Systems

Implementation in MapInfo
Bounds clauses
Custom coordinate systems
Converting
Reprojecting rasters

Exercise 8: Working with coordinate systems

9 – Resources and Utilities

Configuring Mapinfo

10 – Group Exercice

Exercice 10: Mini GIS project

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