GeoData

Introduction to MapInfo Professional

COURSE OUTLINE

This course introduces the underlying principles and methods of Geographical Information Systems (GIS). It examines the processes involved in the capture, storage, manipulation, analysis, presentation and output of digital geographical data in a GIS and provides opportunities for the development of practical skills in processing data using an industry standard GIS software package.

The course comprises a series of presentations and computer-based practical sessions using MapInfo Professional software with example data sets taken from a variety of fields. The main elements of MapInfo Professional are introduced and topics covered include: data management; data visualisation; data quality and analysis; georeferencing; data presentation and reporting.

This course is intended for those who have little or no GIS knowledge or who wish to undertake some formalized training in MapInfo Professional having been largely self-taught in the past.

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 provide delegates with an appreciation of the fundamental concepts of GIS including its strengths and limitations.
- To introduce delegates to the core functionality of the MapInfo Professional software package.
- To teach the fundamental 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 real-world uses of GIS.

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

- What a GIS is; what spatial data is; raster and vector data models
- The core tasks involved in a GIS analysis e.g. data acquisition and input; data storage and management; data manipulation and analysis; and data presentation and output
- The MapInfo Professional user interface
- Importing data from GPS outputs and scanned paper maps
- Handling tables including selections and queries
- Georeferencing raster images
- Creating and editing spatial data
- The steps required to produce paper maps from base data
- Basic geoprocessing tasks e.g. buffering and clipping

For further information please contact:
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University of Southampton
GeoData

Introduction to MapInfo Professional

Day 1

1 - Introduction to GIS

The basics of GIS
Different types of GIS data
Rasters and Vectors
Mapping in layers
Coordinate Systems
Ordnance Survey Data

2 - Introduction to MapInfo

Opening MapInfo
Toolbars and Menus
The Help System
Opening a Table
Map, Browser and Layout Windows
The Layer Control
Using Workspaces

Exercise 2 – Getting Started

3 - Displaying Map Data

Layer Display Options
Style Override
Zoom Layering
Automatic Labelling
Manual Labelling

Exercise 3 – Style overrides and labelling

4 – Selections

About Selections
Selecting Objects on the Map
Selection by Criteria

Exercise 4 – Selections

5 - Thematic Maps

The Principles of Thematic Mapping
Types of Thematic Map
Creating a Thematic Map
Using the Thematic Legend

Exercise 5 – Thematic maps

Day 2

6 – Producing Paper Maps – Layouts

Cartographic Good Practice
Creating Cartographic Legends
The Layout Window
Using the Frame Tool
Setting Map Scales
Printing
Saving as an image

Exercise 6– Layouts

7 – Data Input 1: Digitising

Creating a new table - table structures
Projections
Opening non-native data
Editing Tables in MapInfo
Editing Attributes
Choosing a Drawing Style
Drawing and Editing Map Objects

Exercise 7 – Registering a scanned map for digitising

8 – Data Input 2: Importing

Importing tabular data
Creating points from XY data
Geocoding
Manual plotting
Importing data
The Universal Translator

Exercise 8 – Importing data

9 – Managing Data

Table management
Combining two tables
Updating columns

Exercise 9 – Managing data

10 – Manipulating Spatial Data

Objects menu commands
Buffering
Set Target Editing Model
Checking for spatial data problems

Exercise 10 – Spatial data manipulation

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