

GeoData

De-mystifying Map Projections for GIS Offered for MapInfo and ArcGIS

COURSE OUTLINE

The course is designed to provide GIS professionals with practical training in handling coordinate systems (map projections and datums) within industry standard GIS packages.

The course places less emphasis on the mathematical theory of map projections and more on what the GIS professional needs to know in order to handle projections on a day-to-day basis and to be confident that the projection and parameters used are correct. The course is focussed on practicalities such

as knowing when a dataset is correctly projected or which projection to choose in a given situation.

Combining a series of short lectures supported by practical exercises within the GIS, the exercises themselves are drawn from Frequently Asked Questions to GeoData's GIS support line and from other WWW GIS support databases. This ensures that the course covers the most common difficulties faced by GIS professionals when data need to be projected or transformed..

All of our courses are validated under the Association for Geographic Information CPD scheme.



Course materials

- Each student is provided with a course manual containing course slides and tutor's notes (together with a data CD) for further reference after the course.
- The course manuals contain quick reference sections which allow key course concepts to be rapidly revisited.

Target Audience

- The course is aimed at GIS users whose work requires that they use a variety of different projections, for example if your work is based overseas or offshore

Pre-requisites

- The only real prerequisite of the course is that the attendees are competent to a basic level with either ArcGIS (9.x or above) or MapInfo (7.x or above).

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Overview

Part 1 – The Theory

- Map Coordinates
- Coordinate Systems
- Projections
- Datums
- Some Common Coordinate Systems (e.g. WGS84 Geographic, UTM, BNG etc)

Part 2 - Handling Projections in ArcGIS

- ArcMap (Vector and Raster)
- ArcCatalog
- ArcToolBox

Part 3 - Common Issues

- Determining map projections
- Choosing the right projection
- Dealing with incorrectly projected data
- Coordinate Transformations (getting the parameters right)
- Custom Projections / CAD coordinates
- Area and Distance measurements
- Having confidence in converted positions
- Useful resources

