



GE011: Building Geodatabases



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Training Description:

This training course teaches the essential concepts and skills needed to efficiently create a geodatabase, add data to it, and realistically model the real-world spatial relationships inherent to your data. Participants will learn about unique geodatabase features that help ensure data integrity over time and why the geodatabase is the preferred format for storing and managing geographic data. Course concepts apply to file-based and multiuser ArcSDE geodatabases. This training course is taught using ArcGIS for Desktop Advanced.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Access GIS data stored in file-based geodatabases, multiuser geodatabases, and GIS servers
- ✓ Create an appropriate geodatabase structure to organize data for efficient storage, display, and editing
- ✓ Add rules and behaviors to ensure the spatial and attribute integrity of geographic data
- ✓ Jumpstart geodatabase design using a template data model
- ✓ Create a geodata service to share a geodatabase with desktop, web, and mobile users

Training Designed for:

This course is intended for GIS analysts, specialists, data technicians, database administrators, and others who need to manage and maintain data stored in a geodatabase as well as GIS managers who need to understand the capabilities of the geodatabase may also benefit.

Prerequisite:

Completion of ArcGIS II: Essential Workflows or equivalent knowledge is required.

Training Requirement:

"<u>Hand's on practical sessions, equipment</u> and <u>software will be applied during the course</u> if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

FIVE DAYS:

- Exploring the geodatabase
 - Geodatabase components
 - Connecting to a geodatabase
 - Geodata services
- Creating and loading data
 - Creating a geodatabase
 - Creating feature classes and tables
 - Modifying feature classes and tables



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- Data loading techniques
- Database recovery and backups

Managing raster data

- Considerations for raster management
- Creating a mosaic dataset

Maintaining data integrity using subtypes

- What are subtypes and when should you use them?
- Creating subtypes
- Specifying default values

Maintaining attribute integrity

- Creating attribute domains
- Applying domains to subtypes
- Validating attribute edits

Relating data using relationship classes

- When to use
- Table cardinality
- Relationship class properties and rules

Adding attachments

- Storing file-based information with features
- Adding attachments using a geoprocessing tool

Designing geodatabase topologies

- Topology workflow
- Topology rules
- Validating a topology

Sharing a geodatabase

- Sharing methods: map packages and geodata services
- Publishing geodata services
- Managing service data
- Sharing map packages

Designing a geodatabase

- Design process and considerations
- Template data models

Project: Build a geodatabase

- Create feature classes and tables
- Load data
- Design attribute integrity rules
- Create domains, subtypes, a relationship class, and a topology
- Test rules in an edit session
- Share the geodatabase schema
- Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.



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Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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