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AutoCAD MAP 3D Essentials

This course provides students with an introduction to the fundamentals of AutoCAD® Map 3D 2014. Students will gain an understanding of the drawing-based and geospatial features and functions within AutoCAD® Map 3D. Hands-on exercises will enable students to practice creating, editing, managing, and analyzing mapping data. After completing this course, students will have an understanding of how to effectively leverage AutoCAD Map 3D as a tool to support the planning, design and data management process.

Duration

3 days

Who should attend?

This course is designed for new users of Autodesk Map 3D.

Prerequisites

There are no prerequisites for this course. However, a working knowledge of basic CAD software navigation is highly recommended. Students should also have working knowledge of Microsoft Windows (Win7, XP or 2000).

Typical Schedule

Unless otherwise noted on your class registration e-mail, this class starts each day at 9:00 am and ends at 4:00 pm.

Questions?

Please call us at 800-336-3375 and ask to speak to our Training Coordinator.

Course Outline

Day 1

Getting Started - User Interface

- Overview of the AutoCAD Map 3D 2011 Tutorial Series Course
- Overview of AutoCAD Map 3D 2011 User Interface
- AutoCAD Map 3D 2011 Workspaces
- The AutoCAD Map Task Pane
- Review of AutoCAD Map 3D 2011 User Interface

Drawing Cleanup

- Overview of Drawing Cleanup
- Drawing Cleanup Concepts
- Select Objects to Clean up
- Cleanup Actions Explained
- Select Cleanup Actions
- Select Cleanup Methods
- Select and Review Error Markers
- Drawing Cleanup Review

Attribute Data

- Overview of Attribute Data
- Basic Concepts of Attribute Data
- Overview of Object Data
- Concepts of Object Data
- Create an Object Data Table
- Modify an Object Data Table
- Attaching Object Data Records
- View and Edit Object Data
- Generate Object Data Links
- Review of Object Data
- Overview of External Database Links
- Concepts of External Database

Links

- Attaching a Database
- Introduction to Data View
- Create a Link Template
- Generate Links to Enclosed Blocks
- Select Objects Linked to Enclosed Blocks
- Advanced Data View
- Review of External Database Links
- Choosing the Storage Method
- Attribute Data Review

- Coordinate Systems
- Coordinate Systems Overview
- Concepts of Coordinate Systems

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- Coordinate Systems in AutoCAD Map
- Assigning and Verifying Coordinate Systems
- Tracking Coordinates
- Geodetic Distance
- Coordinate Systems Review

Importing
- Overview of Importing
- Basic Concepts of Importing
- Importing Lines
- Multiple Coordinate Systems
- Import Points
- Import Attribute Data as Object Data
- Import Attribute Data to Linked Database Data
- Review of Importing

Exporting
- Overview of Exporting
- Exporting Lines
- Exporting Closed Polylines with Object Data
- Export to SDF
- Review of Exporting

Source Drawings
- Overview of Source Drawings
- Concepts of Source Drawings
- Create a Drive Alias
- Attaching Source Drawings
- Quick View Source Drawings
- Deactivating and Detaching Source Drawings
- Review of Source Drawings

Day 2

Queries
- Overview of Queries
- Concepts of Queries
- Introduction to Queries
- Simple Location Queries
- Simple Property Query
- Simple Data Query
- Simple SQL Query
- Compound Query
- Query Library
- Report Query
- Alter Properties Query
- Coordinate Transformations
- Create a New Drawing from Source Drawings
- Review of Queries

Save-Back
- Overview of Save-Back to Source Drawings
- Concepts of Save-Back
- Saving Edits Back to Source Drawings
- Review of Save-Back

Raster Images
- Overview of Raster Images
- Concepts of Raster Images
- Inserting a Raster Image
- Working with Images
- Hide and Unload a Raster Image
- Delete an Image
- Review of Raster Images

Object Classification
- Overview of Object Classification
- Concepts of Object Classification
- Create an Object Class Definition File
- Define Object Classes
- Classify Objects
- Create an Object Class Object
- Review of Object Classification

Annotation
- Overview of Annotation
- Concepts of Annotation
- Define an Annotation Template
- Insert Annotations

Edit an Annotation Template and Update
- Compound Annotations
- Review of Annotation

COGO
- Overview of COGO
- COGO Input and Inquiry Concepts
- Inquiry Objects
- COGO Input
- Review of COGO

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Survey
- Overview of Survey
- Concepts of Survey
- Creating a Survey Datastore and Project
- Importing Points
- Using COGO Tools to Create Points
- Survey Review

Topologies
- Overview of Topologies
- Concepts of Topology
- Concepts of Network Topology
- Create a Network Topology
- Work with Topology Objects
- Network Topology Analysis Concepts
- Run a Shortest Path Trace
- Effects of Flow Direction and Resistance
- Run a Best Route Analysis
- Run a Flood Trace Analysis
- Concepts of Polygon Topology
- Create a Polygon Topology
- Concepts of Polygon Topology Analysis
- Create a Topology Based on an Analysis
- Create Buffer
- Topology Overlay
- Review of Topologies

Day 3

Connecting to Feature Sources
- Overview of Connecting to Feature Sources
- Concepts of Feature Sources
- Concepts of Features
- Connect to an SHP Data Store
- Connect to an SDF Data Store
- Concepts of Point Geometry
- Create System DSN
- Connect to an ODBC Database
- Connect to a Raster Image File
- Connect to a DEM File

Viewing Features
- Review of Connecting to Feature Sources
- Working with Feature Sources
- Overview of Working with Feature Sources
- Set Feature Layer Draw Order and Draping
- Using the Data Table
- Create a Filter
- Create a Query
- Query to Add Features
- Data Validation
- Review of Working with Feature Sources
- Feature Styles
- Overview of Feature Styles
- Stylize Polygon Features
- Stylize Line Features
- Stylize Point Features
- Add Zoom Scales
- Create Thematic Rules
- Create a Thematic Map
- Label Features
- Stylize a Raster-Based Surface
- Review of Feature Styles
- Create and Edit Features
- Overview of Create and Edit Features
- Concepts of Editing Features
- Edit Feature Attributes
- Edit Feature Geometry
- Create New Features
- Create Features from Geometry
- Delete a Feature
- Saving a Feature Source Map to AutoCAD Drawings
- Review of Create and Edit Features
- Split and Merge Features
- Overview of Split and Merge Features
- Concepts of Split and Merge Features
- Set Split Rules
- Split Features
- Set Merge Rules
- Merge Features

Note: To receive your certification of completion from Autodesk for this course you must complete the online evaluation form at http://atcevaluation.autodesk.com.