

**Course Title:** Map 3D Introduction

**Course Code:** MAP-1

**Duration:** 2 Days

## Courseware Description

This courseware is designed to enable new users to learn most of the features and functions of AutoCAD Map® 3D software to create, manage, and analyze mapping data. Topics considered fundamental to using AutoCAD Map 3D software are covered in depth. Advanced features are covered, and depending on the needs of each student, can be approached as an introduction or can be followed for a more comprehensive understanding.

## Objectives

The primary objective of the course is for students to learn the fundamentals of AutoCAD Map 3D, and through hands-on exercises learn how to create, edit, manage, and analyze mapping data.

After completing this course, students will be able to:

- Create coordinate geometry and clean up drawings.
- Link and manage attribute data.
- Import mapping data from other applications.
- Set up and manage feature classification.
- Work with raster images.
- Attach and manage source drawings.
- Query objects from source drawings.
- Manage the display of map objects with Display Manager.
- Access, edit, and manage geospatial data.
- Create and analyze topologies.
- Plot map books.

## Who Should Attend

This courseware is designed for new users of map 3D.

## Prerequisites

It is recommended that students have a working knowledge of:

- Completion of [ACAD-1](#) course or equivalent working knowledge of the content of either course.
- The current or a previous release of AutoCAD.
- Creating and editing basic AutoCAD objects.
- Microsoft® Windows® XP or Microsoft® Windows® 2000

## Course Outline

### Getting Started

- The AutoCAD Map 3D Interface

### Creating and Editing Geometry

- Working with Coordinate Geometry
- Performing Drawing Cleanup

### Linking and Managing Attribute Data

- Creating and Attaching Object Data
- Editing and Managing Object Data
- Connecting to a Database
- Defining a Link Template, and Linking Records to Objects

### Importing and Exporting Data

- Importing Data into AutoCAD Map 3D
- Exporting Data to SDF

### Using Object Classification

- Setting Up Object Classification
- Classify, Select, and Create Classified Objects

### Working with Raster Images

- Inserting Raster Images
- Modifying Raster Image Properties and Behavior

### Working with Source Drawings

- Attaching Source Drawings
- Working with Coordinate Systems

### Using Source Drawing Queries

- Define Property and Location Queries
- Define Data Queries
- Compound Queries
- Altering Properties During Queries
- Using the Query Library
- Saving Back Queried Objects

### Using the Display Manager

- About the Display Manager
- Creating Display Maps
- Creating Display Map Scales
- Using the Display Library
- Creating Thematic Maps

### Establishing a Geospatial Environment

- Connecting to a Feature Source
- Using Joins with Feature Sources
- Using Bulk Copy
- Working with Point Data
- Working with DEM Files

### Stylizing Features

- Stylizing Features
- Annotating Features
- Creating Multiple Maps

### Editing Features

- Editing Feature Attributes and Geometry
- Creating Geometry from Features, and Features from Geometry
- Saving FDO Maps to Drawings

### Using Topology and Spatial Analysis

- Creating Network Topology
- Creating Polygon Topology
- Editing and Managing Topologies
- Network Topology Analysis
- Polygon Topology Analysis

### Plotting Maps

- Map Books