

# *Training:* *Autodesk MapGuide* *Application Programming Interfaces (API)*

## **Course Description**

This course provides the fundamentals of the Autodesk MapGuide Enterprise API and provides participants the knowledge and skills to develop web applications based on the API. Examples and exercises are in C#.

Delegates are provided with electronic tutorial materials which include sample code and hands-on labs.

## **Objectives**

At the end of the course, participants will be able to:

- Ø Describe the various components of Autodesk MapGuide Enterprise and their uses
- Ø Connect to data sources and display data in MapGuide Enterprise
- Ø Perform geospatial queries and analysis on MapGuide Enterprise data
- Ø Create, update and delete data in data stores
- Ø Print raster and vector maps using the API

## **Who Should Attend**

This course is designed for developers, distributors, resellers, and experienced users of Autodesk MapGuide Enterprise and users of MapGuide Open Source who want to understand the MapGuide API and develop applications with it.

## **Prerequisites**

The criteria necessary for attending this course include familiarity with Autodesk MapGuide Enterprise or MapGuide Open Source functionality, and basic understanding of .NET programming.

**Course Code: AIT\_MGE\_API**  
**Course Duration: 2 days**

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# Training: Autodesk MapGuide Application Programming Interfaces (API)

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## Course Outline

### **Autodesk MapGuide Enterprise Overview**

This module introduces MapGuide Enterprise, its architecture and components.

- Ø System architecture and technical features
- Ø Map agent
- Ø Map display
- Ø MapGuide Viewer functionality
- Ø MapGuide Studio
- Ø MapGuide Administrator

### **Introduction to MapGuide APIs**

This module discusses the various components of the MapGuide Enterprise API and how they are combined to develop geospatial web applications.

- Ø MapGuide Server API components
- Ø Introduction to MapGuide Server API programming
- Ø MapGuide Viewer API

### **Working with MapGuide resources**

This module explains what MapGuide resources are and how to use and manipulate them.

- Ø Resource service
- Ø Resources and repositories
- Ø Manipulating resources
- Ø Map and map layers
- Ø Creating map output

### **Feature Geometry**

This module discusses Geometry objects, the building blocks of features, used to model real world data.

- Ø Overview of Geometry objects
- Ø Constructing geometries
- Ø Geometry representation
- Ø Geometry format conversion
- Ø Coordinate systems

### **Feature Service – I**

This module introduces the Feature Service API and examines how it is used for feature query and selection.

- Ø FDO Providers and Capabilities
- Ø Feature query
- Ø Feature selection

### **Feature Service - II**

This module discusses feature schema and classes and how to use the Feature service API in creating, updating and deleting features.

- Ø Feature schema
- Ø Creating features
- Ø Updating features
- Ø Deleting features

### **Introduction to Flexible Web Layouts**

This module introduces Flexible web layouts and discusses its different components

- Ø Layout templates
- Ø Template Information XML
- Ø Application Definition
- Ø Flexible web layout home page