

AutoCAD Map 3D for Civil Engineers



Duration | 2 Days

Description:

AutoCAD Map 3D is a powerful design program that supports the ability to link GIS data and objects for the purpose of providing the Civil Engineer with a means to perform site analysis, review and document sustainability requirements and provide access to multiple file types. This course is intended to teach the Civil Engineer the usefulness of Map 3D to meet these project goals.

Prerequisites:

This course is designed for Civil Engineers and Designers with a firm grasp of the fundamental features of AutoCAD Civil 3D and Civil Engineering principles.

It is recommended to have:

- In-depth knowledge of essential Civil 3D features and functionality.
- A working knowledge of Microsoft Windows.

Software used in this course includes:

- AutoCAD Civil 3D
- AutoCAD Map 3D
- Google Earth

Objectives:

The objective of the **AutoCAD Map 3D for Civil Engineers** course is to enable Civil Engineers and Designers to use AutoCAD Map 3D as a tool to perform analysis and create maps to meet project design and sustainable criteria.

After completing this course, students will be able to:

- Establish a geospatial environment.
- Manage geospatial features.
- Analyze the location of a potential building site, perform building orientation and grading, identify hazards within the project area and determine the necessary remediation.
- Use Map 3D and Google Earth to analyze a stream near a project site and use a Civil 3D Corridor to model a stream restoration design.
- Model corridors to avoid wetlands, design detention ponds and design stormwater conveyance channels.
- Identify methods to meet project specific sustainability requirements.

Training Facilities

Virginia Beach, VA
Richmond, VA
Roanoke, VA

Inlet Technology

192 Ballard Court
Suite 306
Virginia Beach, VA
23462

Ph: 757.496.2323
Fax: 757.496.2424

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Course Outline:

Introduction to AutoCAD Map 3D

- Overview of the User Interface

Establishing a Geospatial Environment

- Connecting to a Feature Source
- Working with Point Data
- Using Coordinate Systems
- Query Features on Connect

Stylizing Features

- Stylizing Features

Editing Features

- Editing Feature Attributes and Geometry
- Working with DEM Files
- Moving Data Between DWG objects and FDO Features
- Merging and Splitting Features

Managing Features

- Using Bulk Copy
- Using Joins with Feature Sources
- Using Buffers
- Using Calculated Properties
- Adding Geospatial Data Validation
- Using Overlay Analysis

Job Processes

- Creating a Map Using Cartographic Standards
- Sharing Geospatial Data with a Third Party

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Land Development

- Analyzing Surrounding Areas for Site Selection
- Performing Proximity Analysis for Site Selection
- Analyzing Soil Types for Site Selection
- Creating a Sustainable Grading Design
- Adjusting Building Properties
- Analyzing Parking Footprint
- Analyzing Soil Contamination

Environmental

- Analyzing Streams
- Designing Stream Restorations

Transportation

- Modeling Corridors to Avoid Wetlands
- Designing Detention Ponds
- Designing Stormwater Conveyance Channels

Creating Maps

- Smart Location & Linkage
 - Creating a Proximity to Infrastructure Map
 - Creating an Agricultural Conservation Map
 - Creating a Floodplain Avoidance Map
 - Creating a Preferred Location Map
- Steep Slope Protection
 - Creating a Surface with Slope Banding
 - Proposed Site Grading
 - Proposed Site Grading Mitigation
- Stormwater Management
 - Pre-Development Analysis
 - Post-Development Analysis
 - Flood Storage Analysis
 - Pre-Development vs. Post-Development
 - Proposed Drainage Mitigation Plan
- Network Pattern & Design
 - Creating a Housing Diversity Map
 - Creating a Transit Facilities & Reduced Parking Footprint Map
- Heat Islands & Solar Orientation
 - Creating a Heat Island and Solar Orientation Map
- Walkable Neighborhood
 - Creating a Smart Location Map

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Inlet Training Class Registration Form



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Customer Information

Company _____
Address _____
City _____ State _____ Zip _____
Primary Contact _____
Telephone _____ eMail _____

Training Class Information

Class Name _____
Class Start Date _____ Duration (# of days) _____
Student 1 _____ eMail _____
Student 2 _____ eMail _____
Student 3 _____ eMail _____
Student 4 _____ eMail _____
Student 5 _____ eMail _____
Student 6 _____ eMail _____
Student 7 _____ eMail _____
Student 8 _____ eMail _____
Student 9 _____ eMail _____
Student 10 _____ eMail _____

Payment Information

CREDIT CARD

Type (Circle One) Visa Mastercard American Express
Credit Card Number _____
Expiration Date _____ 3-4 digit Verification Code _____
Name on Card _____ Amount to be Charged \$ _____
Billing Address _____

CHECK

Check Number _____ Amount \$ _____

PURCHASE ORDER

PO Number _____ Amount \$ _____
Purchasing Contact _____ Telephone _____
e-Mail _____

NOTE: Please fax copy of PO with Registration Form