

InfraWorks Fundamentals for Conceptual Design and Visualization

2 days* | 8:30am - 4:30pm

Autodesk InfraWorks Fundamentals is a complete, hands-on tutorial for InfraWorks and InfraWorks 360 that provides you with a fundamental knowledge of the accelerated design process that uses data-rich 3D Models with high-end visualizations. This enables you to create, evaluate, and better communicate 3D site plans proposals for faster approvals.

Prerequisite: A working knowledge of Windows operating system and civil engineering design techniques and principals, preferably completion of the Civil 3D Fundamentals course.

Navigating the User Interface

- Launching the Software
- Overview of the Interface
- Navigating the Model
- Working with Proposals

Connecting to Data Sources

- Sample GIS Data
- Model Builder
- Finding GIS Data
- Geographic Coordinate Systems
- Metadata
- Units

Stylize Data Sources

- Using Multiple Styles to Display Features
- Create Filter Expressions
- Using Scripts to Set Multiple Feature Styles
- Create Style Rules
- Reuse/Share Style Rules

Create Model Elements

- Basic Commands
- Create Conceptual Roads in a Model
- Create Pipe Networks in a Model
- Create Railways in a Model
- Create Water Features in the Model
- Create Land Area

Add Model Details

- Create Buildings in a Model
- Create City Furniture in a Model
- Add Vegetation to a Model
- Add Miscellaneous Details to a Model

Analyzing the Model

- Theme a Data Source
- Line of Sight Analysis
- Measure the Model
- Analyze Shadows

Collaborating with Others

- Share Design Elements with Civil 3D
- Working with Revit Models
- Sharing with InfraWorks 360
- Working with Scenarios

Communicate with Design Stakeholders

- Creating Images
- Working with Storyboards

Introduction to Roadway Design with 360

- Roadway Design
- Modifying Horizontal Layouts
- Modifying Vertical Layouts
- Working with Intersections
- Traffic Simulation
- Suitability Maps
- Corridor Optimization
- Balancing Cut / Fill along a Roadway
- Sight Distance Analysis
- Generating Civil 3D Plan and Profile Sheets

Introduction to Bridge Design with 360

- Bridge Components
- Modifying Bridges
- Bridge Line Girder Analysis

Introduction to Drainage Design with 360

- Watershed Analysis
- Creating and Modifying Culverts
- Pavement Drainage

What students are saying about our courses:

"I loved how the instructor focused the materials to our needs and uses. Great course!"
- *Matthew Crockett,*
Aquaterra Environmental Solutions

"The instructor was very knowledgeable and ensured everyone grasped the concepts before moving on. He answered all questions even if they were outside the scope of the class. Great Job!"
- *Vern Howard,*
Honeywell FM&T

* The suggested course duration is a guideline. Course topics and timeline may be modified by the Instructor based upon the knowledge and skill level of the course participants.