

# InfraWorks Essentials

## Training course outline

InfraWorks 3D design and engineering software provides a real-world solution for your infrastructure design and urban planning. It offers easy integration with other Autodesk applications, and supports BIM workflows.

*InfraWorks Essentials* training is ideal for civil engineers, planners and others who need to create preliminary infrastructure and urban designs and proposals, incorporating a wide variety of data.



### Course summary

Teaches key techniques for infrastructure design and urban planning, including:

- Modelling your project's existing environment, incorporating survey-grade 2D/3D details and GIS data.
- Designing roads, bridges, drainage, and more, incorporating engineering principles.
- Analyzing your model, to make better decisions for sight distance, flood simulation, and more.
- Communicating your 3D site plan proposals for faster approvals.
- Show your designs in a realistic environment by creating high-impact visualisations and videos using storyboards.

### Duration

2 days.

### Who should attend?

Newcomers to InfraWorks and novice InfraWorks users who want a thorough grounding in the application and its key features.

Typical delegates include civil engineers, land planners and surveyors.

### Live online

InfraWorks training is provided live online. We don't currently offer InfraWorks training in-class.

To read about our approach to online training, see [armada.co.uk/liveonline](http://armada.co.uk/liveonline).

### General information

Armada is a long-standing Autodesk authorised Training Centre (ATC), and our courses are accredited by Autodesk.

Courses are hosted by Autodesk Certified Instructors (ACIs) with vast experience of using the application professionally.

Whilst attending training at our centres, you'll have the use of a computer running licensed software to practice the techniques taught.

Refreshments and lunch are provided.

Course fees can be paid by card or bank transfer. We accept purchase orders from UK-registered companies and public sector organisations.

### Course materials and certificate

Delegates receive:

- Comprehensive training materials for InfraWorks.
- An e-certificate from Autodesk confirming attendance on an accredited *InfraWorks Essentials* course.

### After course support

Following InfraWorks training, delegates are entitled to 30 days' email support from their trainer to help with any post-course issues.

### Further information

See: [armada.co.uk/course/infraworks](http://armada.co.uk/course/infraworks).

### Course syllabus

See over.

# Course syllabus

Topics	Sub-topics
<b>Getting started with InfraWorks</b>	The InfraWorks user Interface 3D viewing and navigation tools
<b>Building and managing models</b>	Using the Model Builder Creating and editing models Managing styles
<b>Terrain and feature themes</b>	Creating conceptual roads in the model Creating and adding buildings and other city furniture Creating coverages Add vegetation Creating a pipe network Creating railways and adding railway furniture Creating water features Add miscellaneous details to you model
<b>Road design</b>	Creating and editing roads Creating junctions and roundabouts Modifying horizontal and vertical layouts Working with intersections Balancing cut and fill along the road Line of sight analysis Sight distance analysis

Topics	Sub-topics
<b>Bridge design</b>	Creating bridges Configuring bridges Structural analysis
<b>Drainage design</b>	Creating drainage networks Automatic networks for road models Creating culverts Terrain analysis Watershed analysis
<b>Analysing the model</b>	Measuring the model Analysing shadows Visualising the model at time of day and year
<b>Visual communication and data transfer</b>	Creating high-impact visualisations Using storyboards to analyse and visualize your designs Creating videos from storyboards Importing from and exporting to Civil 3D