

Autodesk Advance Steel Training Course

Course Overview

Course Length: 16-Hours

- 16-Hours (8 x 2-hour) Training
- Remote training over MS Teams
- Sessions are recorded and download links are provided for future reference
- Training for up to 1-3 people
- Sessions can start within 7 days upon ordering
- Courses are private and topics can be customised to suit
- Includes certificate of completion

Autodesk® Advance Steel is a powerful 3D modeling application that streamlines the fabrication process using a 3D model, which is used to create fabrication drawings, Bill of Materials (BOM) lists, and files for Numerical Control (NC) machines.

Since structural steel projects are extremely complex, the Autodesk Advance Steel software is also complex. The objective of this training course is to enable you to create full 3D project models at a high level of detail and set them up in fabrication drawings.

This course focuses on the basic tools that the majority of users need. You begin by learning the user interface, basic 3D viewing tools, and the standard AutoCAD® tools that are routinely used.

Specific Autodesk Advance Steel objects, including structural columns, beams, bracing, plates, bolts, anchors, welds, and additional 3D objects are also covered. You will also learn about the powerful model verification tools. To complete the course, you will learn to edit and generate all of the required documentation files that enable your design to accurately and effectively communicate the final design.

Topics Covered

Understand the process of 3D modeling and extracting 2D documentation from a model in the Autodesk Advance Steel software.

- Navigate the Autodesk Advance Steel interface.
- Work with 3D viewing tools.
- Review helpful AutoCAD tools.
- Work with the User Coordinate System (UCS).
- Use the Autodesk Advance Steel Modify commands.
- Add structural grids.
- Create levels.
- Model columns and beams and add bracing
- Create connections using the Connection Vault.
- Create special parts.

- Verify models using Clash Checking tools.
- Modify a drawing prototype.
- Work within the Drawing Style Manager.
- Create custom connections.
- Create plates and add bolts, anchors, and welds.
- Add grating and cladding.
- Model ladders, stairs, and railings.
- Create concrete objects such as footings.
- Number objects.
- Extract 2D drawings from the model using Drawing Styles and Drawing Processes.
- Review and modify 2D drawings using the Document Manager.
- Modify 2D details with parametric dimensions.
- Revise models and drawings.
- Create BOM lists.
- Export data to .NC and .DXF files.

Prerequisites

Participants attending this Autodesk Advance Steel Training Course should have experience using AutoCAD or AutoCAD-based products and a sound understanding of structural steel design, engineering or fabrication.

Access to Autodesk Advance Steel software and a stable internet connection is required for participation in online training sessions. Prior exposure to civil drafting workflows will help participants get the most from the course.

Training Guide Contents

Chapter 1: Introduction to the Autodesk Advance Steel Software

- 1.1 Introduction to Autodesk Advance Steel
- 1.2 Overview of the Interface
- 1.3 Viewing the Model
- 1.4 Helpful AutoCAD Tools
- 1.5 Working with the User Coordinate System (UCS)
- 1.6 Using the Autodesk Advance Steel Modify Commands

Chapter 2: Building Models

- 2.1 Starting Autodesk Advance Steel Projects
- 2.2 Adding Structural Grids
- 2.3 Creating Levels
- 2.4 Modeling Columns and Beams
- 2.5 Adding Bracing
- 2.6 Integrating with the Autodesk Revit Software

Chapter 3: Creating Connections

- 3.1 Working with the Connection Vault
- 3.2 Editing Beam Intersections
- 3.3 Creating Plates
- 3.4 Adding Features to Plates and Beams
- 3.5 Adding Bolts and Welds

3.6 Creating Custom Connections

Chapter 4: Additional Model Objects

- 4.1 Adding Grating and Cladding
- 4.2 Modeling Ladders, Stairs, and Railings
- 4.3 Creating Concrete Objects
- 4.4 Special Parts

Chapter 5: Model Verifications

- 5.1 Clash Check
- 5.2 Technical Check
- 5.3 Model Check
- 5.4 Joint Design

Chapter 6: Creating Fabrication Drawings

- 6.1 Numbering Objects
- 6.2 Tools for Creating Drawings
- 6.3 Using Drawing Styles
- 6.4 Running Drawing Processes
- 6.5 Modifying Detail Drawings
- 6.6 Revising Models and Drawings

Chapter 7: Bills of Materials and Numerical Control Files

- 7.1 Extract BOM Lists
- 7.2 Exporting Data to .NC and .DXF Files

Chapter 8: Advance Steel Prototypes

- 8.1 Editing a Prototype Drawing
- 8.2 Working with the Page Setup Manager
- 8.3 Title Block Drawing Frame

Chapter 9: Drawing Style Manager

- 9.1 Drawing Style Manager User Interface