

Autodesk® Advance Steel 2018 ESSENTIALS



DESCRIPTION

Covers Autodesk® Advance Steel fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

Autodesk® Advance Steel 2017
www.autodesk.com



PRE-REQUISITES

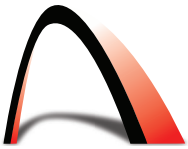
This course is designed for new Autodesk® Advance Steel users. It is recommended that you have:

- Knowledge of Structural drafting skills and terms
- A working knowledge of AutoCAD®
- A working knowledge of Microsoft® Windows®



OBJECTIVES

- | | |
|------------|-------------------------|
| Module 1: | Introduction |
| Module 2: | Starting a Project |
| Module 3: | Working In 3D Cad |
| Module 4: | Advance Steel Interface |
| Module 5: | Coordinate Systems |
| Module 6: | Building Grids |
| Module 7: | Basic Structures |
| Module 8: | Simple Editing |
| Module 9: | Automatic Joints |
| Module 10: | Beam Features |
| Module 11: | Plates |
| Module 12: | Plate Features |
| Module 13: | Connection Elements |
| Module 14: | Custom Connections |
| Module 15: | Structural Elements |
| Module 16: | Other Model Objects |
| Module 17: | Project Explorer |
| Module 18: | Validating a Structure |
| Module 19: | Numbering |
| Module 20: | Creating Drawings |
| Module 21: | Editing Drawings |
| Module 22: | Lists |
| Module 23: | Other Documents |



AutoCAD® 2018 ESSENTIALS



DESCRIPTION

Covers AutoCAD® 2017 fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

Whitefrog Publishing Ltd.
– AutoCAD® 2017 Training Courseware www.whitefrog.co



PRE-REQUISITES

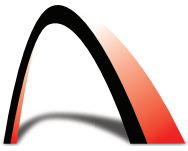
This course is designed for new users of AutoCAD®. It is recommended that you have:

- Architectural design, drafting, or engineering experience.
- A working knowledge of Microsoft® Windows®



OBJECTIVES

- Module 1: Introduction to the Working Environment
- Module 2: Creating Basic Shapes
- Module 3: Organising the Drawing
- Module 4: Object Manipulation
- Module 5: Object Modification
- Module 6: Annotating Drawings
- Module 7: Dimensioning Drawings
- Module 8: Hatching Regions
- Module 9: Using Element Block Libraries
- Module 10: Cross-Referencing Information
- Module 11: Preparing Layouts for Plotting and Publication
- Module 12: External References
- Module 13: User Defined attributes and fields
- Module 14: Introduction to 3D



AutoCAD[®] Civil 3D[®] 2018 ESSENTIALS



DESCRIPTION

Covers AutoCAD[®] Civil 3D[®] fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

ASCENT Center for Technical Knowledge – AutoCAD[®] Civil 3D[®] Fundamentals



PRE-REQUISITES

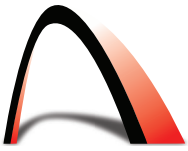
This course is designed for new users of AutoCAD[®] Civil 3D[®]. It is recommended that you have:

- Knowledge of civil engineering principles and processes.
- A working knowledge of AutoCAD[®]
- A working knowledge of Microsoft[®] Windows[®]



OBJECTIVES

1. Navigating the AutoCAD[®] Civil 3D[®] User Interface
2. Leveraging a Dynamic Environment
3. Establishing Existing Conditions Using Survey Data
4. Modelling the Existing Terrain Using Surfaces
5. Designing in 2D Using Alignments
6. Displaying and Annotating Alignments
7. Designing Vertically Using Profiles
8. Displaying and Annotating Profiles
9. Designing in 3D Using Corridors
10. Creating Cross Sections of the Design
11. Displaying and Annotating Sections
12. Designing and Analysing Boundaries Using Parcels
13. Displaying and Annotating Parcels
14. Designing Gravity Pipe Networks
15. Designing Pressure Pipe Networks
16. Displaying and Annotating Pipe Networks
17. Designing New Terrain
18. Analysing, Displaying, and Annotating Surfaces
19. From Design to Construction



Plant Design[®] 2018 INTRODUCTION



DESCRIPTION

This course gives an introduction to AutoCAD[®] Plant 3D and AutoCAD[®] P&ID



TRAINING COURSEWARE

ASCENT Center for Technical Knowledge - Introduction to Plant Design[®] 2017
www.ascented.com



PRE-REQUISITES

This course is designed for new users of AutoCAD[®]. It is recommended that you have:

- Basic Knowledge of Plant Design
- A working knowledge of AutoCAD[®]
- A working knowledge of Microsoft[®] Windows[®]



OBJECTIVES

Introduction to AutoCAD Plant 3D

- Working in a Project
- Opening a Drawing
- Exploring the User Interface
- Managing Layers and Colours

AutoCAD P&ID

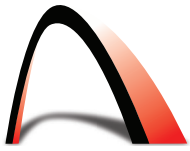
- Creating and Adding Existing Drawings
- Equipment and Nozzles
- Piping
- Instruments and Instrument Lines
- Tagging Concepts
- Annotation Concepts
- Editing Techniques
- Data Manager and Reports
- Custom One-off Symbols
- Offpage Connections
- Advanced Topics and Troubleshooting
- P&ID Admin for Users
- Generating Reports

AutoCAD Plant 3D - Mixed Metric

- Creating Project Folders and Drawings
- Steel Modeling and Editing
- Equipment Modeling and Editing
- Piping Basics
- Piping Editing and Advanced Topics
- Working with P&ID Data in Plant 3D
- Creating and Annotating Orthographic Views
- Creating Isometric Drawings

Setting up and Administering a Plant Project

- Overview of Project Setup
- Overview of Project Structure and Files
- Setting Up Larger Projects
- Defining New Objects and Properties
- Customizing Data Manager
- Creating and Editing Drawing Templates and Data Attributes
- Specs and Catalogs
- Isometric Setup
- Troubleshooting
- Creating and Managing Report Configurations
- Setting Up SQL Express for AutoCAD Plant 3D



Autodesk® Revit® Architecture 2018 ESSENTIALS



DESCRIPTION

Covers Autodesk® Revit® Architecture 2017 fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

Whitefrog Publishing Ltd.
– Autodesk® Revit® Architecture 2017 Training Courseware
www.whitefrog.co



PRE-REQUISITES

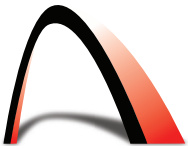
This course is designed for new users of Autodesk® Revit® Architecture. No previous CAD experience is necessary. It is recommended that you have:

- Architectural design, drafting, or engineering experience.
- A working knowledge of Microsoft® Windows®



OBJECTIVES

- Module 0: Autodesk® Revit® in a Nutshell
- Module 1: Introducing Revit as a BIM Tool
- Module 2: Ui Tour, Project Navigation and View Creation
- Module 3: Element Selection and Manipulation
- Module 4: Visibility Control and Categorisation
- Module 5: Model Development Methodology
- Module 6: Wall Creation and Manipulation
- Module 7: Floors, Roofs and Ceilings
- Module 8: Window, Door and Component Use
- Module 9: System Family Editing
- Module 10: Basic Schedules and Legends
- Module 11: Geometry Formation and In-Place Families
- Module 12: Massing Tools and the Building Maker
- Module 13: Stairs, Ramps and Railings
- Module 14: Basic Curtain Walls
- Module 15: Room Data and Colour-Fill
- Module 16: 2D Draughting and Annotation
- Module 17: Sheet Compilation and Publication
- Module 18: Basic Sub-Division and Collaboration
- Module 19: Introduction to the Principles of Family Editing



Autodesk® Revit® Families 2018 LEVEL 1



DESCRIPTION

Covers Autodesk® Revit® Family basics. This course focuses on the creation of 2D Families.



TRAINING COURSEWARE

Courseware developed by Prokon Software Consultants (Pty) Ltd. www.prokonbuild.co.za
www.prokon.com



PRE-REQUISITES

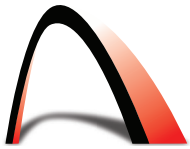
This course is designed for existing users of Autodesk® Revit®. It is recommended that you have:

- Architectural design, drafting, or engineering experience
- Completed Revit®
- Essentials training
- A working knowledge of Microsoft® Windows®



OBJECTIVES

1. Introduction to Families
2. Tags
 - View Tags
 - Element Tags
 - Keynotes
3. Profiles
 - Creating a Profile Family
 - Applying a Profile Family to Model Elements
4. Repeating Details
 - Creating a Repeating Detail
5. Detail Components
 - Creating a Detail Component Family
6. Line Based Families
 - Creating an Annotation Family
 - Creating a Line Based Family



Autodesk® Revit® Families 2018 LEVEL 2



DESCRIPTION

Covers Autodesk® Revit® intermediate/advanced family concepts. This course focuses on the creation of 3D Families.



TRAINING COURSEWARE

Courseware developed by Prokon Software Consultants (Pty) Ltd. www.prokonbuild.co.za
www.prokon.com



PRE-REQUISITES

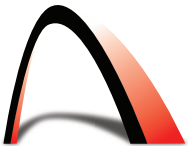
This course is designed for existing users of Autodesk® Revit®. It is recommended that you have:

- Architectural design, drafting, or engineering experience
- Completed Revit® Essentials training
- Completed Revit® Families Level 1
- A working knowledge of Microsoft® Windows®



OBJECTIVES

1. Introduction to Families
2. Solids / Voids
 - Extrusion, Sweep, Blend, Revolve, Swept, Blend
3. 3D Constraints In First Generic Family
 - Creating A Generic Family
 - Applying Parameters To 3D Solids
4. Ladder Family
 - Using Advanced Formulae to add Array Calculations to Components
 - Using Nested Families to Simplify Geometry
5. Truss Family
 - Further Enhance Formulas using Trigonometry
6. Line Based Families to Create Light Runs
 - Creating a Simple Photometric Light
 - Using the Line Based Family to quickly place Multiple Geometry



Autodesk® Revit® MEP 2018 ESSENTIALS



DESCRIPTION

Covers Autodesk® Revit® MEP 2017 fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

Whitefrog Publishing Ltd.
– Autodesk® Revit® MEP 2017
Training Courseware
www.whitefrog.co



PRE-REQUISITES

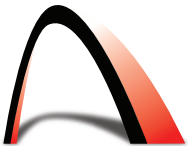
This guide is designed for new users of Autodesk® Revit® MEP. No previous CAD experience is necessary. It is recommended that you have:

- Architectural design, drafting, or engineering experience.
- A working knowledge of Microsoft® Windows®



OBJECTIVES

- Module 0: Revit in a Nutshell
- Module 1: Introduction to the Principles of Bim
- Module 2: UI Tour, Project Navigation and View Creation
- Module 3: Element Selection and Manipulation
- Module 4: Visibility Control and Categorisation
- Module 5: Model Development Methodology
- Module 6: Establishing a Project
- Module 7: Introduction to Building Elements
- Module 8: Equipment, Fixtures and Fittings
- Module 9: Introducing Systems
- Module 10: Basic Schedules and Legends
- Module 11: Geometry Formation and In-Place Families
- Module 12: Mechanical Systems
- Module 13: Electrical Systems
- Module 14: Plumbing Systems
- Module 15: Rooms, Areas, Spaces and Volumes
- Module 16: 2D Draughting and Annotation
- Module 17: Sheet Compilation and Publication
- Module 18: Basic Sub-Division and Collaboration
- Module 19: Introduction to the Principles of Family Editing



Autodesk® Revit® Structure 2018 ESSENTIALS



DESCRIPTION

Covers Autodesk® Revit® Structure 2017 fundamentals, so you become quickly productive with the software



TRAINING COURSEWARE

Whitefrog Publishing Ltd.
– Autodesk® Revit® Structure
2017 Training Courseware
www.whitefrog.co



PRE-REQUISITES

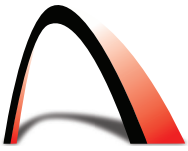
This guide is designed for new users of Autodesk® Revit® Structure. No previous CAD experience is necessary. It is recommended that you have:

- Architectural design, drafting, or engineering experience.
- A working knowledge of Microsoft® Windows®



OBJECTIVES

- Module 0: Revit in a Nutshell
- Module 1: Introduction to the Principles of Bim
- Module 2: UI Tour, Project Navigation and View Creation
- Module 3: Element Selection and Manipulation
- Module 4: Visibility Control and Categorisation
- Module 5: Model Development Methodology
- Module 6: Establishing a Project
- Module 7: Modelling Basics - Walls, Columns, Beams & Bracing
- Module 8: Foundations and Piling
- Module 9: System Family Editing
- Module 10: Basic Schedules and Legends
- Module 11: Geometry Formation and In-Place Families
- Module 12: Slab and Roof Tools
- Module 13: Stairs Ramps and Railings
- Module 14: Beam and Truss Systems
- Module 15: Construction sequencing (Phasing)
- Module 16: 2D Draughting and Annotation
- Module 17: Sheet Compilation and Publication
- Module 18: Basic Sub-Division and Collaboration
- Module 19: Introduction to the Principles of Family Editing
- Module 20: Considering Options and Alternatives



Autodesk® VEHICLE TRACKING



DESCRIPTION

Covers Autodesk Vehicle tracking, to become more productive with the software



TRAINING COURSEWARE

Created in-house with our technical knowledge and product expertise.



PRE-REQUISITES

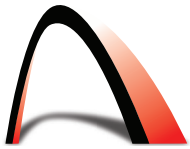
This course is designed for existing user of AutoCAD and Civil 3D that want to utilize Autodesk Vehicle Tracking for design purposes. It is recommended that you have:

- Knowledge of the engineering principles and processes
- A working knowledge of AutoCAD and Civil 3D
- A working knowledge of Microsoft Windows
- An understanding of vehicle maneuverability
- Good knowledge of design considerations for parking layouts and turning radii



OBJECTIVES

1. Utilize AVT basics
2. Select the appropriate vehicle from standard libraries
3. Comprehend interoperability between AVT objects and other objects
4. Manual design optimization methods
5. Comprehend standard libraries
6. Customize standard libraries
7. Acknowledge AVT assumptions
8. Improve design efficiency
9. Design traffic circles
10. Apply design checks to traffic circles
11. Analyze traffic circles
12. Select the appropriate parking layouts from standard libraries
13. Designing parking layouts
14. Modify parking layouts with appropriate tools
15. Analyze parking layouts
16. Leveraging Civil 3D with AVT
17. Add design data to a civil 3D profile
18. Explore additional tools
19. Analyze overall design in a 3D perspective



PROKON
Software Consultants

Prokon Software Consultants (Pty) Ltd.
Prokon Build (A Division of Prokon Software Consultants)
10 Guild House, 239 Bronkhorst Street, Nieuw Muckleneuk, Pretoria 0181
PO Box 17295, Groenkloof, 0027, South Africa
VAT | 4770140731 Registration No | 1993/007557/07

AUTODESK

Gold Partner

Authorized Training Centre
Authorized Academic Partner
Authorized Certification Centre



Autodesk® 3Ds MAX 2018 ESSENTIALS



DESCRIPTION

Covers Autodesk® 3ds Max 2017 fundamentals, so you become quickly productive with the software.



TRAINING COURSEWARE

John Wiley & Sons Inc. –
Autodesk 3ds Max 2017
Essentials www.wiley.com



PRE-REQUISITES

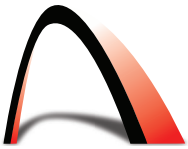
This course is designed for new users of Autodesk® 3ds Max®. It is recommended that you have:

- A working knowledge of Microsoft® Windows®



OBJECTIVES

- Chapter 1: 3ds Max Interface
- Chapter 2: Your First 3ds Max Project
- Chapter 3: Modeling in 3ds Max: Architectural Model Part
- Chapter 4: Modeling in 3ds Max: Architectural Model Part II
- Chapter 5: Introduction to Animation
- Chapter 6: Animation Principles
- Chapter 7: Character Modeling Part I (Optional)
- Chapter 8: Character Modeling Part II (Optional)
- Chapter 9: Introduction to Materials
- Chapter 10: Textures and UV Workflow: The Alien
- Chapter 11: Character Studio: Rigging (Optional)
- Chapter 12: Character Studio: Animation (Optional)
- Chapter 13: Introduction to Lighting: Interior Lighting
- Chapter 14: 3ds Max Rendering
- Chapter 15: Mental ray
- Chapter 16: Revit Integration



Autodesk® Storm and Sanitary analysis



DESCRIPTION

Covers Autodesk® Storm and Sanitary analysis fundamentals so that you can design your storm and sanitary networks effectively.



TRAINING COURSEWARE

Developed in-house from the top Software Consultants in South Africa



PRE-REQUISITES

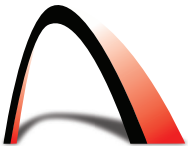
This course is designed for users with fundamental understanding of AutoCAD® Civil 3D®. It is recommended that you have:

- Knowledge of civil engineering principles and processes
- A working knowledge of AutoCAD®
- A working knowledge of Microsoft® Windows®
- A working knowledge of Microsoft® Excel®



OBJECTIVES

- Navigate the Autodesk® Storm and Sanitary analysis interface.
- Leveraging existing civil 3D objects and dynamics.
- Establish network design parameters / conditions within AutoCAD® Civil 3D® and Autodesk® Storm and Sanitary analysis, EPA SWMM included.
- Export data for analysis in Autodesk® Storm and Sanitary analysis.
- Utilize Autodesk® Storm and Sanitary analysis engine.
- Visualize results dynamically within Autodesk® Storm and Sanitary analysis.
- Import the final design to AutoCAD® Civil 3D®.
- Displaying and Annotating design data on Profiles
- Displaying and Annotating design data on Plan.



Executive Guide to BIM



DESCRIPTION

This module provides a high-level explanation, in laymen's terms, of the terminology and principles of BIM and how it may affect you and your business.



TRAINING COURSEWARE

Whitefrog Publishing Ltd. -
Executive Guide to BIM
Training Courseware
www.whitefrog.co



PRE-REQUISITES

This course is designed for anyone within your company to understand the importance of the principles, terminology & implementation of BIM.

- Admin Staff
- Software Users
- Managers
- Business Owners
- CEO

No computer skills or previous experience needed.



OBJECTIVES

- Understanding the BIM Process.
- The BIM Lifecycle.
- BIM Management.
- Digital Exchange of Data.
- BIM Execution Plan.