CONCEPT

Autodesk Revit Training Course for BIM Modelling and Project Delivery



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Introduction:

Autodesk Revit training for BIM modelling and project delivery is a 1-week course for design authoring specialists, project information coordinators, structural drafting technicians, and multi-disciplinary model managers, culminating in a Multi-Disciplinary Federated BIM Model and Project Information Delivery Pack. Uncoordinated architectural drawings, recurring geometric clashes, and non-standardised metadata cause substantial design rework, schedule slippages, and contractor tender disputes. Nominees already produce two-dimensional drafting sheets, review technical architectural layouts, and manage digital drawing archives, with practical instruction delivered through an interactive software lab. CoreConcept Training Center delivers this Autodesk Revit training course for BIM modelling and project delivery.

Course Objectives:

- Construct coordinated architectural and structural Revit building models aligned with project grids, levels, and Level of Development specifications.
- Establish collaborative worksharing central files and workset structures within an ISO 19650 Common Data Environment.
- Generate detailed construction drawing sheets, technical annotations, and automated component quantity schedules directly from parametric building models.
- Execute cross-disciplinary clash detection routines and spatial coordination audits between architectural, structural, and building services submodels.
- Export standardised openBIM Industry Foundation Classes data models and BIM Collaboration Format issue reports for project stakeholders.
- Assemble a multi-disciplinary federated BIM model and project information delivery pack to support capital project procurement stages.

Target Audience:

- Design drafting practitioners responsible for developing parametric architectural models and construction documentation packages
- BIM coordination technicians responsible for managing multi-disciplinary model federation and spatial clash resolution workflows
- Structural engineering modellers responsible for generating coordinated structural framing systems and foundation detail drawings
- Project information operators responsible for maintaining Common Data Environment containers and information exchange registers

Course Outline:

Day 1: BIM Principles and Autodesk Revit Environment Setup

- ISO 19650 Concepts Establishing Digital Information Management Foundations
- Autodesk Revit User Interface Configuring Project Template Work Environments
- Project Information Requirements Defining Baseline Spatial Grids And Levels
- Autodesk Revit Family Hierarchy Establishing Parametric Component Classifications
- Level Of Development Specifications Setting Baseline Geometric Modelling Depth

Day 2: Information Management Standards and Architectural Modelling Frameworks

- ISO 19650-2 Delivery Phase Standards Governing Information Exchange Protocols
- Autodesk Revit Compound Walls Constructing Parametric Architectural Enclosures
- BIM Forum Level Of Development 300 Modelling Assemblies
- Autodesk Revit Fenestration Tools Placing Hosted Doors And Windows
- Common Data Environment Workflows Organising Model Container File Structures

Day 3: Structural Assembly Modelling and Core Documentation Workflows

- Autodesk Revit Structural Tools Generating Grids Columns And Framing
- Autodesk Revit Floor And Roof Tools Building Horizontal Assemblies
- Autodesk Revit Circulation Tools Constructing Multi Storey Stairs And Ramps
- Autodesk Revit Annotation Tools Generating Dimensioned Construction Plan Sheets
- Autodesk Revit Scheduling Tools Extracting Parametric Component Quantity Takeoffs

Day 4: Multi-Disciplinary Model Federation and Clash Detection Diagnostics

- Autodesk Revit Shared Coordinates Aligning Disciplinary Submodel Spatial Positions
- Autodesk Revit Worksharing Worksets Managing Concurrent Multi User Central Models
- Navisworks Manage Tools Executing Automated Cross Disciplinary Clash Tests
- buildingSMART BIM Collaboration Format Tracking Geometric Conflict Resolutions
- ISO 19650-5 Security Guidelines Managing Information Container Access Permissions

Day 5: Software Lab Practice and Delivery Pack Assembly

- Autodesk Revit Project Models Reconciling Structural And Architectural Assemblies
- Autodesk Revit Annotation Engines Finalising Multi Disciplinary Production Sheet Sets
- buildingSMART Industry Foundation Classes Exporting Validated OpenBIM Deliverables
- Navisworks Clash Audit Workflows Verifying Federated Spatial Clearance Compliance
- Multi Disciplinary Federated BIM Model And Delivery Pack Assembly

Skills You Will Gain:

- Parametric Architectural Modelling
- Worksharing Central Model Configuration
- Automated Quantity Schedule Extraction
- Cross-Disciplinary Clash Detection
- openBIM IFC Model Exchange
- Common Data Environment Administration
- Level of Development Implementation

Why Attend This Course:

- Present a validated Multi-Disciplinary Federated BIM Model and Project Information Delivery Pack to project managers and client delivery teams to verify tender readiness.
- Authorise design coordination changes and spatial clash clearances based on verified multidisciplinary federation audits.
- Eliminate costly on-site structural interferences and uncoordinated drawing errors by identifying spatial design conflicts during pre-construction modelling.
- Train internal drafting teams in standardised Revit worksharing protocols, template configurations, and openBIM exchange methods.

Conclusion:

Following this course, the organisation utilises the Multi-Disciplinary Federated BIM Model and Project Information Delivery Pack to direct asset coordination and tender document extraction. Project management leads and lead consulting engineers use this delivery pack to sanction detailed construction issues, approve subcontractor work packages, and substantiate milestone sign-offs. After concluding the initial coordination cycle using the deliverable, the project steering group should review cross-disciplinary spatial clash resolution logs, parametric schedule accuracy metrics, and Common Data Environment information exchanges to standardise ongoing delivery protocols across the enterprise.

Frequently Asked Questions FAQ:

Which roles should be nominated for the Autodesk Revit training course for BIM modelling and project delivery?

Architectural drafters, BIM coordinators, structural detailers, and building services technicians should attend. These practitioners are responsible for developing technical models, standardising parametric project libraries, and managing multidisciplinary coordination files within capital project delivery environments.

What experience should nominees possess before attending the Autodesk Revit training course for BIM modelling and project delivery?

Nominees should possess practical experience in computer-aided drafting workflows, technical construction drawing interpretation, and general digital file management. Prior familiarity with fundamental architectural or structural concepts enables participants to navigate parametric building information modelling interfaces and tools effectively.

What deliverable is produced during the Autodesk Revit training course for BIM modelling and project delivery?

Participants produce a Multi-Disciplinary Federated BIM Model and Project Information Delivery Pack. This operational artefact contains coordinated architectural and structural Revit models, standard parameter schedules, Level of Development documentation, and openBIM IFC export configurations ready for project deployment.

Which frameworks underpin the Autodesk Revit training course for BIM modelling and project delivery?

The course adheres directly to ISO 19650-1 and ISO 19650-2 information management principles. It also incorporates buildingSMART openBIM Industry Foundation Classes exchange protocols and BIM Forum Level of Development specifications to govern digital modelling precision and collaborative project delivery.