

# Autodesk Revit Structure & ACC Cloud Workflow

## Target Audience

This course is designed for BIM managers, project managers, civil engineers, design coordinators, and construction professionals seeking to combine Revit structural modelling with Autodesk Construction Cloud for cloud-based collaboration, document management, and Common Data Environment (CDE) workflows. Ideal for teams transitioning to fully digital, cloud-connected project delivery.

## Course Objective

To equip participants with the skills to build and manage Revit BIM models and deploy them within Autodesk Construction Cloud — enabling cloud-based worksharing, design coordination, issue management, and information delivery across multi-discipline project teams in compliance with ISO 19650 CDE principles.

## Course Outcome

After completing this course, learners will be able to create and publish Revit models to ACC, set up and manage a CDE environment, enable cloud worksharing, use Design Collaboration and Model Coordination tools in ACC, manage issues and RFIs digitally, configure access permissions and approval workflows, and deliver BIM data to clients through ACC's handover tools.

## Course Outline

The course comprises **40-hours** of theory and demonstrations and is divided into **9** different chapters. Each chapter is designed with practical examples and guided exercises to reinforce learning.

### Chapter 0: Introduction to Cloud BIM Delivery

- Course Overview and Industry Context



- The Evolution of BIM: From Desktop to Cloud
- ISO 19650 and CDE Principles
- Overview of Autodesk Construction Cloud Modules
- **Practice Exercises**

### **Chapter 1: Revit Structure – Model Authoring for Cloud**

- Revit Project Setup and BIM Standards for Cloud Projects
- Structural Modelling: Foundations, Frames, Slabs and Walls
- Managing Linked Models and Coordination Files
- Workset Setup and Model Preparation for Cloud Worksharing
- IFC and NWC Export Settings for ACC Compatibility
- **Practice Exercises**

### **Chapter 2: Autodesk Construction Cloud – Platform Overview**

- ACC Hub Setup: Projects, Members and Roles
- Docs Module: Folder Structure, Permissions and Transmittals
- Version Control and File Approval Workflows
- Linking Revit to ACC and Publishing Cloud Models
- ACC Mobile App for On-Site Access
- **Practice Exercises**

### **Chapter 3: Cloud Worksharing with Revit**

- Introduction to Revit Cloud Worksharing (BIM 360 / ACC)
- Creating and Managing Cloud-Based Central Files
- Synchronising, Saving and Managing Local Sessions
- Workset Visibility and Multi-User Collaboration
- Conflict Resolution and Version Recovery
- **Practice Exercises**

### **Chapter 4: Design Collaboration in ACC**

- Design Collaboration Module: Packages and Timelines
- Sharing and Consuming Models Across Disciplines
- Consuming Shared Packages in Revit



- Model Comparison and Change Detection
- **Practice Exercises**

## **Chapter 5: Model Coordination & Clash Review in ACC**

- Setting Up Model Coordination in ACC
- Automated Clash Detection Between Disciplines
- Reviewing, Assigning and Resolving Clashes in ACC
- Integration with Navisworks for Detailed Review
- BCF Issue Export and Resolution Tracking
- **Practice Exercises**

## **Chapter 6: Issues, RFIs and Submittals Management**

- Issues Module: Creating, Assigning and Tracking Issues
- RFI Management Workflow in ACC
- Submittals: Creating, Reviewing and Approving
- Linking Issues to Model Elements and Drawings
- **Practice Exercises**

## **Chapter 7: CDE Setup and Information Management**

- Common Data Environment Configuration per ISO 19650
- WIP, Shared, Published and Archived States
- Naming Conventions and Metadata in ACC
- Access Control: Roles, Permissions and Approval Gates
- Audit Trails and Information Security
- **Practice Exercises**

## **Chapter 8: Project Reporting & Handover**

- Insights and Dashboard Reporting in ACC
- Construction Progress Tracking and Photo Documentation
- Asset Module for Facility Management Handover
- Exporting and Delivering BIM Data to Clients
- Capstone: Full ACC Project Setup and Coordination Exercise

