

## CONSTRUCTION DOCUMENTS - COURSE CONTENT

### INTRODUCTION AND GENERAL DISCUSSIONS:

- Project Setup and Workflow
- Folder Structures and naming Conventions
- View Specific Elements
- Project Datums
- The Project Browser

### THE SITE

- Creating Property Lines
- Adding Property line Tags and Contours
- Project Location and Coordinate Systems
- The Shared coordinate system (COORDINATION)
- Project North and True North
- Project relocation and re-orientation (mirroring)

### BASICS OF MODELING

- Changing the extents of levels and grids
- Assigning scope boxes to levels and grids
- Limiting Visibility of Datum Using Scope Boxes

### CONTROLLING GRAPHICS APPEARANCE

- Scale and Detail Level
- Plan View Range and Underlays
- Understanding View Discipline for Collaboration and Coordination
- View Templates, view types and Temporary view Properties
- Visibility and Graphic Overrides
- Object styles and Subcategories
- Creating selection and Rule based Filters
- Model and Annotation Crop regions
- Configuring System Family Coarse Scale Fill Patterns (Level of Detail depending on the Sale of the view)
- Saved View Conditions (The .ini File settings)

## CONTROLLING PROJECT INFORMATION AND ORGANIZATION

Understanding and Placing Rooms

Room Calculation Point

Adding Project Information

Project Browser Schedules, Views and Sheets Management

Project Templates

Purge and Project Standards transfer

Save time with starting views

Understanding Parameters

Creating and modifying Project Parameters

Creation of Shared Parameter Files and Shared Parameters

Using Shared Parameters in Projects and Tags

Creation and Association of Global Parameters

Global Parameters in Dimensions and as Reporting Parameters

Using Unifomat Assembly Code

## PROJECT STANDARD ANNOTATION

Standardizing Annotation Standards and Default Tags

Use of Room, Area and material Tags

Calculated values in tags

Text, Leaders, Lists and symbols in notes

Element, Material & User Keynotes

Note blocks, Legends and Symbols

Place stair tread or riser numbers in plan, elevation, or section views

Linear, Angular, Radial, Arc and Spot Dimensions

Dimensions Witness Lines, Text leaders and Graphics

Dimension chains for entire walls

## ADVANCED PROJECT ANNOTATION AND DATA EXTRACTION

Scheduling Fields from Rooms and Project Information

Formulas in schedules

Formatting schedules appearance (this will use several topics in schedules)

Conditional formatting in schedules

Key schedules

Schedule Templates

Images in schedules

Room, Area and Takeoff Schedules

Constraints by dimensions

Spot dimensions for Elevations, Coordinates and Slopes

## DETAILING

Understanding and using Components, Detail Lines, Draworder and Line work overrides in Details

Filled and Masking regions

Annotation in Detail views

Inserting views and 2D elements from files and Saving Views to files

## THE POWER OF GROUPS

Creation and management of Model and Attached groups

Attaching Annotation Detail Groups (Adding)

Creation of Detail Groups

Understanding Editing Groups

Allowing Parameter Variation between Groups

Groups to links and Links to Groups

Adding Parameters to Model Groups

## THE PHASES OF A PROJECT

Understanding and Managing Phases

Phase Filters and Status Graphic Overrides

Assigning Phases to Views

#### TEAM COLLABORATION AND COORDINATION

Controlling the Display of Elements in a Linked Model

Scheduling and tagging Elements of Linked Models

Monitoring and Performing a Coordination Review with Single or Linked Projects

Team Collaboration by Checking for Interferences

#### DESIGN OPTIONS DISCUSSION

Introduction to Design options

How Design Options Impact Documentation

#### PRESENTATION VIEWS

3D Views for Annotation

Sketchy Lines and Decals for Presentations

Depth Cueing

#### VIEWS AND SHEETS (and Printing)

Floor Plan, Ceiling Plan and Plan Region views

Exterior and Interior Elevations

Section Views

Splitting Section and Elevation Views

Call Out and Drafting views

Match lines and View References

Creating Sheets and Sheet Indexes

Fine Tuning Sheets with custom Title Blocks, Key Plans and Revision Schedule

Print setup for PDF printing

#### INTEROPERABILITY

CAD files, Linking or Importing

Linked CAD Files and Coordinate Systems

CAD Files as Underlays to Create Building Models

Introduction to the use of IFC files

Exporting 2D and 3D CAD formats

Room and Area html Reports

Exporting to IFC