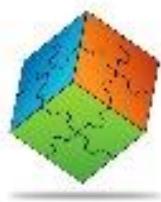




REVIT ELECTRICAL

BIM Modelling



Multi Axis Innovations
Innovative solutions to aec Industry

MULTI AXIS INNOVATIONS
RAJKUMAR ROAD, BANGALORE

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Session 1

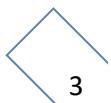
Basic of BIM

- **Introduction to BIM**
- **Create a project file from template**
- **Understanding of user interface**
- **Create a simple room with four walls**
- **Place floor, roof for room**
- **Place door and windows**
- **Create section and elevation views**
- **Place all views in defaults sheet**
- **Make changes in door positions**
- **Delete few doors and see change in schedule and views**

Session 2

View model

- **Change scales and duplicate views**
- **Duplicate of views**
- **Detail view creation**
- **Visual style view creation**
- **Place Section views**
- **Place Elevation views**
- **Using view cube create different views**
- **Understand Navigation panel**
- **Use Section box for creating view**
- **Hide and Unhide elements**
- **Temporary hide elements**
- **Shortcuts in Revit**



Session 3

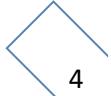
Managing Views and Properties

- **Create Duplicate Views**
- **Duplicate view as dependent**
- **Create Match line**
- **Add Reference to views**
- **Create Call out view**
- **Place in Sheets**
- **View Crop Properties**
- **Visual graphics**
- **Filters in view**
- **View range**
- **Plan region view**
- **Scope box properties**
- **Modifying view controls**
- **Discipline**
- **Under Lay of View**
- **Selection of Objects**
- **Hide and Unhide Elements**

Session 4

Link Arch Model, Copy Monitor

- **Create Mechanical/Electrical file From template**
- **Link Arch Model**
- **Use different options for linking**
- **Copy monitor levels and grids**
- **Room bounding Option**
- **Understand Phase in Linking**
- **Tag Room Names**
- **Create Master Elevation and Plan Views**



- Understand Co-ordination Review
- Link Unload/Reload

Session 5

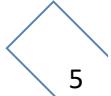
Place Lights

- Place Lights
- Place Lights with work Plane
- Change Different type of Lights
- Place Lights on Wall
- Create Ceiling Plan
- Difference between Ceiling plan and Floor plan
- Change Workplace of light
- Type properties of Light
- Instance properties of light
- Adjusting Tiles in Ceiling Plan
- Ines File in Lights
- Visibility Graphics of Light
- Group of Lights

Session 6

Cable Tray,Conduits,Electrical Device,Switches and Electrical Family

- Place Electrical Device,switches and Electrical Equipment
- Place Cable tray,conduits
- Cable tray offset
- Cable tray type and Instance properties
- Cable tray configuration for Intersection
- Place conduit
- Conduit configuration
- Placing conduits inside cable tray
- Conduit and cable tray schedule



Session 7

Electrical Settings,Circuits of Light,Power,Data,Fire Alarm,Panel

Schedule,System Browser

- **Voltage and Distribution System Configuration**
- **Configure Families**
- **Create Lighting Circuit**
- **Add Power to Circuit**
- **Add Switches to Circuit**
- **Create Data,Communication,Fire Alarm Schedule**
- **Create Panel Schedule**
- **Edit Panel Schedule**
- **Check System Browser**
- **Add Wires to Circuit and Change**
- **Load Calculations**
- **Wire Settings**
- **Panel Schedule Template**

Session 8

Annotation

- **Tag by category,Room tag and tag all**
- **Spot elevation/Spot Co-ordinate/Spot Slope**
- **Place text,justification,find and replace**
- **Leaders**
- **Dimension Linear/Radial/DiameterElements**
- **Detail line /Regions**
- **Revision Cloud**
- **Key notes**
- **Title block edit**
- **Symbols**

- Custom Title Book

Session 9

Collaborate

- Create Workset
- Create Central File
- Backup of Central File
- History of Central File
- Copy monitor Elements
- Co-ordination Review
- Workset assign to Elements
- Clash Detection With in File
- Clash Detection With, Linked Elements
- Save Views with workset
- Workset options

Session 10

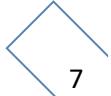
Insert and Link

- Insert AutoCard File
- Insert Revit File
- Understand Options of insert Revit
- Add images in project
- Manage Link Files
- Manage Decal

Session 11

Manage Models

- Topics
- Transfer properties from other files



- Object Styles
- Line Style/Fill pattern Create and Manage
- Project Information and Parameters
- Shared Parameters
- Project Location and Properties
- Element ID and Search
- Warnings in Model
- Macros in Revit
- Units,Snap in Model
- Project Parameters
- Material

Session 12

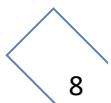
Manage Room and Spaces

- Room and Room Tag
- Creating Spaces
- Modifying Spaces
- Area and Volume Calculation
- Creating Zone
- Systems Browser and Zone
- Colour Scheme

Session 13

Create Schedules

- Add Fields in Schedule
- Use Sorting and Grouping in schedule
- Use Filter in Schedule
- Format Field in schedule
- Calculate Totals
- Formatting header and schedule lines/Fonts
- Phases in Schedule



- Schedule from Linked file
- Create calculated Value in Schedule
- Count and Sum of Fields

Session 14

Electrical Sittings

- Add Filed in Schedule
- Use Sorting and Grouping in schedule
- Use Filter in Schedule
- Format Field in schedule
- Calculate Totals
- Format header and schedule lines/Fonts
- Phases in Schedule
- Schedule from Linked file

Session 15

Families

- Loading of Families
- View Families in Project browser
- Types of Families
- Editing annotation family
- Create model in place family
- Elements of Family
- Family Category and Parameters
- List of websites providing Revit families
- Modelling in Family using Extrusion Blend,Resolve, Sweep
- Void in Family
- Visibility in Family
- Reference plane and assigning Parameters
- Create Symbolic lines Family

Session 16

Presentation of Documents and Printing

- Align grid
- Guide grid
- Consistence in line styles
- Using view templates
- Printing options
- Saving print sets
- Margins in Sheets
- Title on Sheet Value
- View List
- Sheet List

Session 17

View elements in Link and View Template

- View elements according to Host
- View elements according to link
- View elements according to custom
- Worksets for viewing model
- Using Filters List in View
- Using View Template and Assign
- Managing Starting View
- Project Browser Management
- Title on Sheet View
- Managing View Title Family

Session 18

SAMPLE PROJECT

LOD 100 Project

- Single Floor Project With 7 Rooms of total 200 Square meter
- Project Should have all Family name and View names
- Warning Should be minimum

- All the Sheet view should be places in Sheet
- Create Schedule for Wall, Door and Window with Count
- Project Information to be filled
- All the Floor plan should be dimensioned and tagging
- Develop Four Elevations and Dimension them
- Develop two Sections of the Building
- Show 3D View for all the Rooms
- Minimum 10 Sheets in the project