

# **REVIT MEP COURSE SYLLABUS**

**Duration: 40 hrs** 

#### **Module 1: Introduction to Revit MEP**

- Overview of BIM (Building) Information Modeling)
- Role of Revit MEP in BIM workflows
- Revit user interface & amp; navigation
- Understanding Revit project files (.rvt) and templates
- · Project setup: units, levels, grids, and coordinates

#### Module 2: Starting an MEP **Project**

- · Linking architectural and structural models
- Understanding Revit worksharing and collaboration
- Project templates for MEP disciplines
- Visibility/graphics settings for MEP elements
- Copy/monitoring elements from linked models

#### Module 3: HVAC (Mechanical Systems)

- Creating spaces and zones
- · Heating and cooling load calculations
- Duct system fundamentals and layout

- Placing air terminals, diffusers, and equipment
- Duct routing and fittings
- System inspector and flow analysis
- Creating mechanical schedules

#### → Module 4: Electrical Systems

- Understanding electrical settings and components
- Creating electrical circuits
- Lighting systems: fixtures and switches
- Power systems: panels, outlets, and equipment
- · Cable trays and conduits
- · Electrical load calculations and panel schedules
- · Annotation and tagging for electrical elements

#### Module 5: Plumbing & amp; **Piping Systems**

- Plumbing fixture placement
- Cold and hot water systems
- Sanitary and vent systems
- Fire protection piping (sprinkler layout basics)
- Pipe routing and fittings
- System checks and flow analysis
- · Creating plumbing schedules

## **Module 6: Coordination** & Interference Checking

- Using the Coordination Review tool
- Clash detection and interference checking
- Coordination between MEP and other disciplines
- · Working with linked models

### Module 7: Families and **Components**

- Introduction to Revit families (loadable and system families)
- · Creating and modifying MEP families
- Managing family parameters and connectors
- Importing manufacturerspecific content

### **Module 8: Documentation** & Detailing

- Creating and managing MEP views (plan, section, 3D)
- Annotating drawings (tags, dimensions, text notes)
- · Legends, schedules, and keynotes
- Sheet creation and layout
- Printing and exporting to PDF/DWG

#### Module 9: Visualization & Presentation

- Creating realistic 3D views
- · Material assignments and lighting
- Rendering basics
- Walkthroughs and presentation outputs

#### ◆ Module 10: Project **Management & amp;** Collaboration

- Employee Management System
- E-Commerce Product Catalog & Ordering System
- Bug Tracker with Al-assisted **Testing**
- Real-Time Chat Application
- **API Integration and Automation**

# **CHENNAI**

#### **←--- VELACHERY -**

New # 30, Old # 16A, Third Main Road, Rajalakshmi Nagar, Velachery, (Opp. to Murugan Kalyana Mandapam), Chennai – 600 042.

+91 98844 12301

#### **OMR**

Plot No.8, Vinayaga Avenue, Rajiv Gandhi Salai, (OMR), Okkiampettai, (Behind Okkiyampet Bus Stop) Chennai – 600 097.



+91 96001 12302

# **OVERSEAS**

USA

Houchin Drive, Franklin, TN -37064. Tennessee

UAE

Sima Electronic Building, LLH Opposite, Electra Street – Abu Dhabi





