



# KG MECH

*Electro Mechanical Pvt. Ltd.*



# REVIT MEP



SANTOSH NAGAR | MASAB TANK

## PROGRAMME DESCRIPTION

### REVIT MEP Modeling for the Construction Industry

KG -MECH Pvt. Ltd. with its inception has been diversified its business in different service sectors such as Contracting, Real time training, Technical Services .

**“KG MECH was founded with an idea of bridging the gap between the talented, yet unpolished resources and the employers for better hiring and achievement of the goals.”**

KG-MECH offers leadership and training programs for the advancement of Engineer’s technical excellence, promotes to incorporate code of ethics in their way of life and place of work. The high level of expertise they deliver makes sure that the student learns the concept and performs it with high caliber.

**“80% Practical Training & 20% Theoretical Training”**

At KG MECH, we term Real Time Training as a methodology and practice instituted upon the trainees to improve their skills and match the job requirements. Our trainees are been made to work on the Gulf-oriented projects rigorously with expert supervision to build a bridge between the theoretical knowledge and the practical job work.

This program introduces the full range of REVIT MEP topics from the definitions, Basic Calculations-manual & software, Codes & Standards, Drafting and Installation Procedures. Each topic is presented so as to demonstrate the “real world” impact of design decisions on resulting system performance. (See the “Course Outline” section for details of topics.)

This Training Programme gives comprehensive knowledge of Design, Drafting & Installation of Building Service. The Programme focuses on the real time work related concepts, issues, which is enhanced by the inputs of the instructor’s practical experience.

#### WHOSHOULD ATTEND

MEP Engineers / Designers / Draftsmen

Professionals involved in design, drafting, estimation, and BIM modeling of MEP systems for buildings and infrastructure projects.

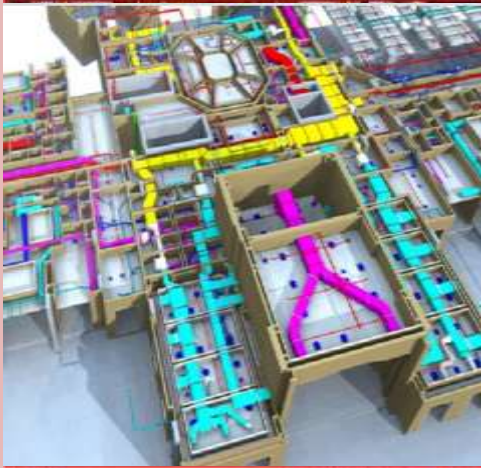
#### Mechanical, Electrical & Plumbing Engineers

Engineers who wish to understand, model, and coordinate complete Electro-Mechanical systems using Revit MEP.

#### Entry-Level & Experienced Engineers

Those who want to upgrade their skills, streamline their understanding of BIM workflows, and build a strong career in Revit MEP Design & Modeling.





Achieve complete understanding of Revit MEP System components, BIM workflows, modeling techniques family creation, coordination methods, clash detection documentation. and Revit-based HVAC/MEP drawings.

**“Complete Revit MEP Training”**



## MODULE 1 – BIM INTRODUCTION

- Introduction to REVIT
- Building Information Modeling
- Purpose & Benefits of BIM
- Fundamentals of REVIT Software
- REVIT Project Templates
- REVIT Family Templates
- Introduction to Building Services – Architecture, Structural, MEP
- Work Flow Chart of Building Services
- Basic Views
- Exploring the User Interface
- Ribbon Framework
- Guidelines for Using the User Interface

## MODULE 2 – REVIT MEP

- Introduction to MEP Systems
- Components of MEP Systems
- Co-ordination in MEP Systems

## MODULE 3 – REVIT MECHANICAL HVAC

- Linking REVIT Files
- Linking CAD & Other Format Files
- Managing Links
- Copying and Monitoring Elements
- Copying Grids & Levels
- Preparing Space, Zone & Building Analyze Menu
- Heating/cooling definitions
- Heating/Cooling loads calculations
- HVAC System creation and layouts
- Creating Spaces in Close & Open Areas in Multi-Level
- Duct System Modeling
  - Planning Duct Systems
  - Manually Creating Ductwork





Achieve complete understanding of Revit MEP System components, BIM workflows, modeling techniques family creation, coordination methods, clash detection documentation. and Revit-based HVAC/MEP drawings.

**“Complete Revit MEP Training”**

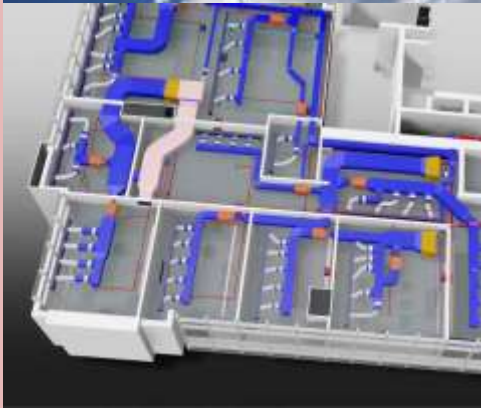


- Automatic Ductwork Layout
- Adding and Modifying Fittings
- Adding & Modeling Duct Accessories
- Air Terminals
- Secondary Supply Air Systems
- Adding Mechanical Equipment
- Inspecting the Ducting System
- Chilled Water Piping System Modeling
  - Creating Piping Systems
  - Manual Piping Network
  - Auto Layout of Piping System
  - Sizing the Piping System
  - Adding & Modifying Fittings
  - Adding Valves as per Equipment
  - Inspecting the Piping System
- Co-ordination

#### **MODULE 4 – REVIT ELECTRICAL**

- Linking REVIT Files
- Linking CAD & Other Format Files
- Copying Grids & Levels
- Electrical Setting
- Lighting
  - Types of lights (recessed, surface mounted & wall mounted)
  - Lighting Placement
  - Switch board placement
  - Wiring connection from switch board to lighting
- Power
  - Types of Receptacles
  - Receptacle Placement
  - Wiring connection from DB to receptacles
- Conduits
  - Different sizes of conduit





Achieve complete understanding of Revit MEP System components, BIM workflows, modeling techniques family creation, coordination methods, clash detection documentation. and Revit-based HVAC/MEP drawings.

**“Online & Class Room Training”**



- Conduit fittings & Accessories
- Conduit placement in project
- Cable Trays
- Cable tray types & its sizes
- Cable tray fittings & accessories
- Placement of cable tray in project
- Distribution boards(DB)
- Different sizes of DB's on current rating
- DB placement in project
- Wiring connection from DB to loads
- Transformers

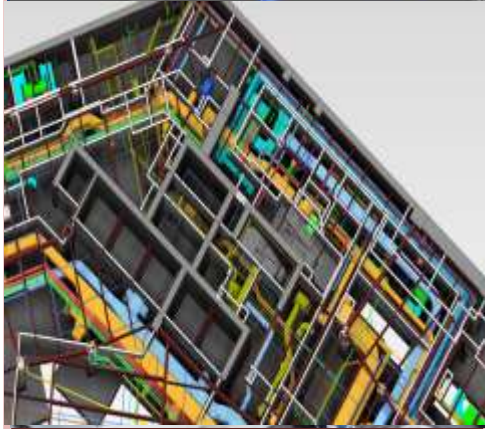
### **MODULE 3 – REVIT PLUMBING**

- Linking REVIT Files
- Linking CAD & Other Format Files
- Copying Grids & Levels
- Adding Plumbing Fixtures
- Modifying Plumbing Fixtures
- Drawing Piping for Plumbing Systems
- Working with Plumbing Systems
- Plumbing and Pipe Work
- Mechanical Setting – Pipes
- Piping Systems
- Hot Water & Cold Water Systems
- Parallel Pipes
- Modifying Pipes
- Adding and Modifying Fitting

### **MODULE 4 – REVIT FIRE FIGHTING**

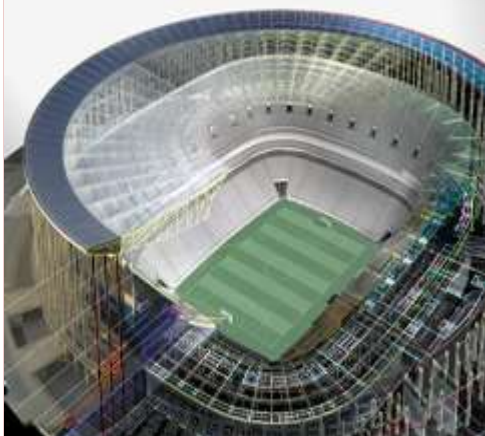
- Linking REVIT Files
- Linking CAD & Other Format Files
- Copying Grids & Levels
- Zoning of Firefighting Systems
- Firefighting Systems-Concepts
- Sprinkler Piping System Modeling
  - Creating Piping Systems & Settings
  - Adding Sprinklers
  - Manual Piping Network





Achieve complete understanding of Revit MEP System components, BIM workflows, modeling techniques family creation, coordination methods, clash detection documentation. and Revit-based HVAC/MEP drawings.

**“Online & Class Room Training”**



- Adding & Modifying Fittings
- Adding Valves as per Equipment
- Inspecting the Piping System
- Co-ordination

### **MODULE 7 – REVIT MODELING**

- 3D Modeling in REVIT
- Modeling Commands
- Void Forms
- REVIT Families
- Creating and Modifying Families

### **MODULE 8 – REVIT PRESENTATION**

- Manage Menu
- Views Menu
- Annotation Menu
- Annotations & Dimensions
- Tags & Texts
- Modify Menu
- Layout Setting in REVIT
- Legends & Symbols
- Creating Schedules
- Plotting in REVIT
- Rendering Settings

### **MODULE 9 – REVIT ADVANCE**

- Collaborate Menu
- Concept & Creation of Central File
- Working Options of Central File
- Fabrication Settings in REVIT
- Work Plane Settings
- Material Properties
- View Range Options
- Bill of Quantities





**Mr. Syed Abdul Gaffar**  
M.Tech - HVAC, Design Specialist  
HRO – Education Director



**“Highly Experienced Trainers  
with GULF Experience”**



**INSTRUCTOR PROFILES**

Mr. Syed Abdul Gaffar, M.Tech – HVAC has over 12 years of experience in MEP systems including Design, Drafting, Installation & Maintenance of the MEP Systems with international Experience.

He has served to international projects of UAE, KSA, Qatar, USA & India, as Senior Mechanical Engineer & MEP Systems Manager. During his career, Mr. Syed Abdul Gaffar was involved in many prestigious projects like Residential, Commercial, Industrial & Schools Projects.

His Experience includes MEP Design for Building Services as per ASHRAE, SMACNA, NFPA, NEC, DEWA, ASME CODES.

Currently Mr. Syed Abdul Gaffar is a CEO, KG – MECH Electro-Mechanical LLC. He is also presiding the responsibilities as on Education Director, HRO (Human Rights Observers). He has successfully trained numerous Mechanical engineers from different nationalities for HVAC/MEP courses organized by KG – MECH.

Mr. Syed Abdul Gaffar is

- ❑ Education Director – HRO, Human Rights Observers, Hyderabad Cell.

Mr. Syed Abdul Gaffar is a member of

- ❑ NFPA – National Fire Protection Association
- ❑ ISHRAE – Indian Society of Heating Refrigeration & Air Conditioning Engineers
- ❑ IGBC – Indian Green Building Council
- ❑ IHRA – International Human Rights Association





Contact Us



**TRAININGS**

**SANTOSH NAGAR OFFICE:**

Address: 17-1- 380/E/42/A,  
1<sup>st</sup> Floor Opp. to Pillar No 63  
Santosh Nagar, Hyderabad

Mob:- +91 97006 40034  
+91 99890 61778

**MASAB TANK OFFICE:**

Address: 10-4/A/12/1,  
1<sup>st</sup> Floor, Above AlHabeeb Trust,Opp.  
to NMDC, Masab Tank,Hyderabad

Mob:- +91 97009 10004,

**We have Expert Faculties in this three  
Engineering Fields:**

**Upto 15yrs Exp MECHANICAL ENGINEERS**

**Upto 08yrs Exp ELECTRICAL ENGINEERS**

**Upto 07yrs Exp CIVIL ENGINEERS**