

Course Description: This Professional Revit MEP Course in Dubai covers electrical, HVAC and plumbing designs for infrastructural projects. Delivered through hands-on learning, the course helps MEP engineers master Autodesk Revit's parametric tools to model, coordinate and document building services.

REVIT MEP

1. Introduction to Revit MEP:

- Introduction to BIM and its benefits in MEP design
- Overview of Revit MEP interface and tools
- Understanding the Revit MEP workflow

2. Basic Revit MEP Tools and Techniques:

- Setting up project parameters, units, and templates
- Creating and modifying basic building components (walls, floors, roofs)
- Adding and editing mechanical, electrical, and plumbing systems
- Managing views, sheets, and schedules for documentation

3. HVAC (Heating, Ventilation, and Air Conditioning) Design:

- Introduction to HVAC systems and components
- Creating air distribution systems and ductwork
- Defining heating and cooling loads for accurate system sizing
- Analyzing system performance and optimizing designs
- Implementing energy-efficient

4. Electrical System Design:

- HVAC strategies Designing power distribution systems (panels, circuits, transformers)
- Creating lighting fixtures, switches, and receptacles
- Conducting load analysis and circuiting for electrical systems
- Implementing electrical panel schedules and annotations
- Exploring advanced electrical design features and calculations

5. Plumbing System Design:

- Designing domestic water supply and sanitary systems
- Creating plumbing fixtures, pipes, and fittings
- Analyzing pipe sizing and pressure loss calculations
- Implementing plumbing system annotation and documentation
- Exploring sustainable plumbing design practices

6. Fire Protection Systems:

- Designing fire sprinkler systems (pipes, sprinklers, valves)
- Configuring fire alarm systems and devices
- Analyzing fire protection requirements and codes
- Creating accurate fire protection plans and documentation
- Understanding fire protection system coordination with other disciplines

7. Collaboration and Project Coordination:

- Linking and managing external files (architectural, structural)
- Coordinating MEP systems with other disciplines
- Implementing clash detection and resolution techniques
- Using Navisworks for project review and coordination
- Exploring collaboration workflows using cloud-based platforms

8. Parametric Families and Custom Content Creation:

- Introduction to parametric families in Revit MEP
- Creating custom MEP families (equipment, fixtures, components)
- Modifying existing families for specific project requirements
- Utilizing shared parameters and schedules for family management

9. Advanced Topics:

- Generating complex systems (e.g., hydronic systems, electrical risers)
- Creating advanced views, filters, and visibility settings
- Applying energy analysis and sustainable design principles
- Exploring add-ins and extensions for enhanced functionality
- Advanced techniques for system optimization and performance analysis

10. Real-World Projects and Case Studies:

- Hands-on exercises and practical applications
- Working on real-world MEP design scenarios
- Solving complex design challenges
- Showcasing industry best practices and standards