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**BIM PROFICIENCY TRAINING**

# FUNDAMENTAL MODELLING OF MECHANICAL & PLUMBING SYSTEMS

**OBJECTIVE:**

The developments of the course outcome are based on the international and local standards of the scope of work, defined for BIM modellers' roles and responsibilities. It is, therefore, targeted at skill sets to develop competency in hands-on technical skill, BIM knowledge and pro-active problem solving which tailored to suit local requirement. Upon completion, the participants are expected to be able to:

- a) Operate a 3D parametric modelling tool.
- b) Interpret design intent to be used in technical modelling for M&P of a building.
- c) Develop a 3D BIM-M&P model appropriately.
- d) Extract and prepare related design deliverables such as drawings, material schedule, schedule of accommodation, etc.
- e) Utilise 3D BIM-M&P model as interaction, communication and collaboration tools.
- f) Apply BIM-M&P based process flow of technical modelling
- g) Identify problems and associated challenges in delivering BIM-based process flow.

**PROGRAM PRE-REQUISITE:**

- a) Working knowledge of Microsoft® Windows® Operating Systems
- b) Knowledgeable of architectural design, drafting, or engineering
- c) CAD drafting or modelling experience in building and construction project is an extra advantage
- d) Basic knowledge of BIM tools and concept
- e) BIM Fundamental Concept and Theory

# BIM PROFICIENCY TRAINING FUNDAMENTAL MODELLING OF MECHANICAL & PLUMBING SYSTEMS

## Phase 1

### THEORETICAL AND MODEL NAVIGATION

- a) Fundamental concept of BIM M&P
- b) The nature of parametric tools
- c) Model review and navigation
- d) Show and hidden model element of a building
- e) Presentation of design intent

## Phase 2

### MODEL AUTHORIZING

- a) Extraction information from schematic & shop drawing
- b) Setting up project template
- c) Setting up elevation and gridline by copy monitor
- d) Link CAD drawing
- e) Placement of mechanical & plumbing components
- f) Duct and pipe routing for the mechanical & plumbing system
- g) Interference check and manage system browser

## Phase 3

### DELIVERABLE EXTRACTION

- a) Tagging and annotation for drawings
- b) Title block setup and drawings preparation
- c) Schedule of materials

## Phase 4

### BIM MODELLER CERTIFICATION

- a) BIM Modelling revision
- b) CIDB BIM M&P Modeller Exam

#### FOR MORE INFORMATION:



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#### PAYMENT

- Account Name : Uni-Technologies Sdn Bhd
- Bank Name : CIMB Bank Berhad
- Account No. : 8006056882

Method Transfer : Electronic Fund Transfer (EFT)\*  
Kindly send proof of payment to [bimcdis.act@utm.my](mailto:bimcdis.act@utm.my)



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