



# UTNM

UNIFIED TRAINING & MANAGEMENT  
RESOURCES SDN BHD

# CIDB

## BUILDING INFORMATION MODELLING (BIM) TRAINING COURSE SYLLABUS

**UNIFIED TRAINING & MANAGEMENT  
RESOURCES SDN BHD**

UNIT 3A-03, BLOCK A, LOBBY A  
KOMPLEKS KELANA JAYA CENTRE POINT  
NO. 3, JALAN SS7/19, KELANA JAYA  
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## **COURSE DESCRIPTION**

A 4-days CIDB BIM Fundamental Modelling of Architecture training is suitable for beginners in learning about building plans creation and visualizations that are both beautiful and accurate.

This course incorporates the features, commands, and techniques for creating, editing, annotating, tagging, scheduling, and detailing model (BIM) with Autodesk Revit. Interactive exercise throughout the training explores how to create the basic architecture model using Autodesk Revit. The exercise materials are provided in high quality printed format.

This CIDB BIM Fundamental Modelling of Architecture take places in various myBIM satellite training center throughout Malaysia, and includes a 3-day training that lasts 7 hours per day and 1 day CIDB BIM Modeller certification examination.

## **FUNDAMENTAL MODELLING OF ARCHITECTURE**

### **Day 1: Introduction**

- Introduction to basic concept
- Introduction to Revit interface and function
- Model navigation Architecture Modelling
- Adding Elevations and Gridlines
- Creating wall
- Adding doors and windows

### **Day 2: Creating Architecture Modelling**

- Creating floor
- Creating staircase
- Creating shaft opening
- Creating roof
- Adding furniture components

### **Day 3: Modelling Output**

- Annotation and Tagging
- Labelling and tagging
- Dimensioning
- Room tag
- Creating door and windows schedule
- Creating schedule of accommodation

### **Day 4: CIDB BIM Modeller Assessment**

- Revision
- Examination

## **REGISTER NOW AT:**

<https://www.utm.my/course/fundamental-modelling-of-architecture/>

## **MARKETING AGENT:**



## **CONTACT US FOR MORE INFO:**

**+6011 2888 5505**

[bim@utm.my](mailto:bim@utm.my)

[www.utm.my](http://www.utm.my)

## **COURSE DESCRIPTION**

CIDB BIM Fundamental Modelling of Structure course is a 4 days training in Malaysia that is suitable for beginners to learn how to create structural elements and components in BIM environment.

Using Autodesk Revit, the course incorporates the features, commands, and techniques for creating, editing, annotating, tagging, scheduling, and detailing structural model. Our hands on and interactive exercise will help the participants in exploring how to create the basic structural model using Autodesk Revit. Participant also will get our high quality printed format module developed by Malaysia BIM experts.

This CIDB BIM Fundamental Modelling of Architecture take places in various myBIM satellite training center throughout Malaysia, and includes an 3-day training that lasts 7 hours per day and 1 day CIDB BIM certification examination.

## **FUNDAMENTAL MODELLING OF STRUCTURE**

### **Day 1: Introduction**

- Introduction to basic concept
- Introduction to Revit interface
- Model navigation
- Link with architecture model
- Copy monitor (levels)
- Create new views in structural plans
- Importing drawing files
- Adding grid lines to the imported drawings

### **Day 3: Creating Drawing Sheet**

- Adding project information
- Creating sheet drawing
- Adding sheet to the project
- Adding new views in sheets

### **Creating Component Libraries**

- Creating pile caps families
- Setup pile caps libraries parameters and pile caps material parameter
- Creating square piles
- Setup square piles parameters and square piles material parameter
- Create CIDB title block
- Setup parameters and text
- Inserting image in title block

### **Day 2: Creating Structure Modelling**

- Customization component family libraries
- Adding structural columns
- Adding rectangular beams to the levels
- Creating structural floor
- Creating load bearing wall
- Draw wall opening
- Adding stumps
- Adding pile caps and square piles

### **Modelling Output**

- Schedules / Quantities
- Calculate and produce total quantities in the schedule

### **Annotation and Tagging**

- Labelling and tagging
- Dimensioning

### **Day 4: CIDB BIM Modeller Assessment**

- Revision
- Examination

## **REGISTER NOW AT:**

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## COURSE DESCRIPTION

This 5 days BIM course cover the fundamental of road design and was developed based on Arahan Teknik Jalan (ATJ) JKR and Road Engineer Association Malaysia (REAM).

Participants will learn the theory of BIM for Roads & Highways and how it differs from conventional method. Using AutoCAD Civil 3D and InRoads 360 as the platform, this comprehensive training will ensure that participants can appreciate BIM in infrastructure project. The interactive and hands-on exercise features, commands, and techniques for creating, editing, annotating and detailing Infrastructure BIM model with AutoCAD Civil 3D using high quality printed format module.

CIDB BIM Fundamental Modelling of Infrastructure (Roads & Highways) are conducted in various myBIM satellite training center throughout Malaysia, and includes a 4-day training, approximately 28 hours and 1 day CIDB BIM Modeller certification examination.

## FUNDAMENTAL MODELLING OF INFRASTRUCTURE (ROADS & HIGHWAYS)

### Day 1

#### CHAPTER 1: FUNDAMENTAL BIM INFRASTRUCTURE (ROAD & HIGHWAY)

- What Is BIM Road & Highways
- The Usage Of NCS
- Drone Application
- Introduction To *Dokumen Teknikal Jalan*
- BIM Implementation

#### CHAPTER 2: INTRODUCTION TO BIM AUTHORIZING TOOLS

- Touring Autocad Civil 3D 2019 Interface
- Exercise 1
- User Interface Customisation
- Understanding The Dynamic Data Relationship
- Understanding Object Style
- Understanding Label Style
- PC Setup

#### CHAPTER 3: MANAGING SURVEY DATA

- Creating COGO Point
- Changing Object Style and Label Style of a Point
- Description Keys Set
- Creating A New Label Style
- Copy Label Style to Another Drawing
- Creating New Object Style
- Using New Object Style
- Copy Object Style to Another Drawing
- Importing Survey Point Data
- Creating A Point Group
- Creating Feature Line
- Connecting Points
- Cleaning Survey Plan
- Inserting Survey Data

### Day 2

#### CHAPTER 4: CREATING SURFACE

- Create Surface from Contour
- Creating Surface from Points
- Creating Surface from Text
- Controlling Build Surfaces
- Adding Breaklines
- Edit Surface Triangulation

#### CHAPTER 5: CREATING ROAD ALIGNMENT

- Creating Alignment from Object
- Using Alignment Creating Tools
- Editing Alignment
- Editing Alignment Label

#### CHAPTER 6: CREATING VERTICAL ALIGNMENT

- Creating Surface Profile
- Creating Vertical Alignment
- Editing and Labelling Profile



**Day 3**

**CHAPTER 7: CREATING AND CALCULATING SUPERELEVATION**

- Preparing superelevation

**DAY 8: CREATING ASSEMBLIES AND INSERTING SUB ASSEMBLIES**

- Creating Assemblies
- Inserting Sub Assemblies

**CHAPTER 9: CREATING CORRIDOR AND INTERSECTION**

- Creating Corridor
- Creating Intersection
- Editing Intersection
- Creating Corridor Surface

**Day 5:**

**CIDB BIM MODELLER ASSESSMENT**

- Revision
- Examination

**Day 4**

**CHAPTER 10: SAMPLE LINES, CROSS SECTION VIEWS AND COMPUTE MATERIALS**

- Creating Sample Lines
- Compute Materials
- Generate Volume Report
- Creating Section Views

**CHAPTER 11: PLAN PRODUCTION AND REPORTS**

- Creating View Frames
- Creating Sheets
- Producing Report

**CHAPTER 12: DESIGN COLLABORATION**

- Solid Extraction
- Extended Data
- Exporting Civil 3D to Naviswork

**REGISTER NOW AT:**

<https://www.utm.my/course/fundamental-modelling-of-infrastructure-roads-highways/>



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## **COURSE DESCRIPTION**

Building Information Modelling (BIM) is part of Malaysian Government initiative towards better construction industry. Now is the best time to take up Fundamental Modelling of Mechanical & Plumbing (M&P) courses because in 2020, the government will mandate the usage of BIM for projects above RM100 million.

CIDB BIM Fundamental Modelling of Mechanical is a 5 days hands-on training that will guide the participants using high quality printed module to design, create, model, annotate and label the 3D BIM Mechanical model. On the last day of the class, the participants will take an examination and if they pass, they will be certified as BIM Modeller by CIDB.

## **FUNDAMENTAL MODELLING OF MECHANICAL AND PLUMBING**

### **Day 1: Introduction**

- Introduction to BIM M&P
- Introduction to Revit User Interface
- Setup New Project
- Modelling Plumbing System
- Project Browser Setup

### **Day 2: Creating CWS Modelling**

- Cold Water System (CWS)
- Sanitary Plumbing System (SPS)
- Modelling of Mechanical System
- Project Browser Setup)

### **Day 3: Creating FPS and ACMV Modelling**

- Fire Protection System (FPS)
- Air Conditioning & Mechanical Ventilation system (ACMV)
- System Browser For M&P
- Coordination

### **Day 4: Creating Model Output**

- Deliverable
- Annotation Tagging
- Preparation of Schedule Output
- Preparation of Drawing Output
- 3D Rendering

### **Day 5: CIDB BIM Modeller Assessment**

- Revision
- Examination

## **REGISTER NOW AT:**

<https://www.utm.my/course/fundamental-modelling-of-mechanical-plumbing/>



## **COURSE DESCRIPTION**

With the rise of Industrial Revolution (IR) 4.0, Malaysian Government has take the initiative towards better construction industry and start to promote the usage of BIM since 2014.

By 2020, the government will mandate the usage of BIM for projects above RM100 million. This CIDB BIM Fundamental Modelling of Electrical is a 5 days hands-on training that will guide the participants using high quality printed module to design, create, model, annotate and label the 3D BIM Electrical model. On the last day of the class, the participants will take an examination and if they pass, the will be certified as BIM Modeller by CIDB.

## **FUNDAMENTAL MODELLING OF ELECTRICAL**

### **Day 1: Introduction**

- Introduction to BIM ELECTRICAL
- Introduction to Revit User Interface
- Modelling Process Flow
- Unhide Program Data
- Opening Revit Electrical Template

### **Day 3: Creating Power and ICT Modelling**

- Routing of Lighting Components (Conduit)
- Load Power Family
- Placing Power Components
- Routing of Power Components (Conduit)
- Load ICT Family
- Placing ICT Components
- Routing ICT Components (Cable Tray)

### **Day 5: CIDB BIM Modeller Assessment**

- Revision
- Examination

### **Day 2: Creating Lighting Modelling**

- Linking with Architectural Modelling
- Copy Monitor – Level
- Copy Monitor – Grid
- Activate Views in Electrical Plans at Project Browser
- Link CAD
- Load Lighting Family
- Placing Lighting Component
- Editing Family (Adding Conduit Connector)

### **Day 4: Creating Model Output**

- Visibility /Graphics Control (Filter Conduit)
- Interference check – Revit
- System Browser
- Schedule/Quantities
- Sum Up Total Count
- Annotation Tagging
- Drawing Sheet
- 3D rendering
- Exporting to DWG

## **REGISTER NOW AT:**

<https://www.utm.my/course/fundamental-modelling-of-electrical/>



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