











BIM PROFICIENCY TRAINING

# FUNDAMENTAL MODELLING OF STRUCTURE

#### **COURSE OUTCOME:**

The developments of the course outcome are based on the international and local standards of scope of work, defined for BIM modellers roles and responsibilities. It is therefore, targeted at skill sets to develop competency requirement. Upon successful completion of this course, the participants are expected to be able to:

- Operate a 3D parametric modelling tool
- Develop a 3D BIM model appropriately
- Utilise 3D BIM model as interaction, communication and collaboration tools
- Apply BIM based process flow of technical modelling
- · Identify problems and associated challenges in delivering BIM based process flow

#### Pre-Requisite:

- Working knowledge of Microsoft® Windows® Operating Systems
- · Knowledgeable of architectural design, drafting, or engineering I CAD drafting or modelling experience in building and construction project is an extra advantage
- · Basic knowledge of BIM tools and concept
- · Has attended BIM Fundamental Concept and Theory.

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## FUNDAMENTAL MODELLING OF STRUCTURE

#### **COURSE OUTLINE:**

# O<sub>1</sub>

#### Introduction

- Introduction to basic concept
- Introduction to Revit interface
- Revit features and function
- Model navigation

#### Creating Structure Modelling

- Link with architecture model
- · Copy monitor (levels)
- Create new views in structural plans
- Importing drawing files
- Adding grid lines to imported drawings

DAY **02** 

## Creating Structure Modelling (Cont)

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

#### **Modelling Output**

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

#### **Annotation and Tagging**

- · Labelling & tagging
- Dimensioning

DAY O3

#### **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 & pile caps material parameter
- Setup square piles parameters & square piles material parameter
- Create CIDB title block
- Setup parameters & text
- Inserting image in title block

)3 DAY

Revision

Exam

#### FOR MORE INFORMATION:





swinburne.edu.my/shortcourses



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