

## Talk on “Overview on BIM Fundamentals”

Organised by Information and Communications Technology Special Interest Group, IEM

BEM Approved CPD/PDP Hours: Applying

Day/Date: 11 August 2018, Saturday  
Time: 11.00 am – 1.00 pm (Refreshments will be served at 10.00 am)  
Venue: Wisma IEM, Auditorium Malakoff, Ground Floor  
Speaker: Ir. Gary Chien and Ms. Kritika Prasad

### SYNOPSIS

This part of the course focuses specifically on “Process” as well as “People”. It comprises of a series of modules that introduce information management to users (asset owners and managers, designers, construction professionals and supply chain). It has been designed to develop an understanding of the principles and potential of Building Information Management (BIM) and to introduce some of the best practices of those principles. It looks at the reasons for digitalization of the industry and dispels some of the misunderstandings and mystique that has developed around the subject of BIM. Ultimately, the whole focus of this course is to train the digital engineers for a potential digital engineering future. Including specific process and methods supported by case studies; the modules concentrate on responding to information requirements, collaboration in developing and delivering solutions for the entire lifecycle of assets.

### Learning Objectives

This requires the demonstration of a complete knowledge of the BIM process & the ability to create the project environment in which BIM can realize its full potential. Through our interactive awareness program, participants will cover the entire BIM project by following a standard methodology through its lifecycle. The individual will be guided through each of the major project stages, from the strategic definition through design, construction, and handover to operations and end of use. At each stage, the course would demonstrate how to balance technical requirements with information management skills hence providing confidence for seamless BIM implementation methodology. The course aims at sharing the best practices and knowledge with the users. It is complemented by the methods required at each stage of the BIM project process; and will have the ability to successfully create and manage BIM enabled framework for varied infrastructure using principles and appropriate skills.

### BIODATA OF SPEAKER

#### 1) Ir. Gary Chien Fan Chee

Ir. Gary Chien holds a BEng (Hons) and MBA from University of Melbourne. He has more than 20 years of engineering experience in infrastructure and built environment projects. Ir Gary Chien works at OPUS International (M) Berhad which is a member of UEM Group. He advocates a Common Data Environment (CDE) to facilitate collaboration across project teams. Ir Gary Chien serves on the ICT SIG at IEM. He also serves as Second Interviewer for Professional Interview examinations.

#### 2) Ms. Kritika Prasad

Ms. Kritika has a degree in 2014 with a Bachelors in Architecture from Indian Institute of Technology, Kharagpur which has been followed by a career within and around the AEC Industry specializing in BIM. Kritika who is currently holding the position of BIM Advancement Academy Manager, has experience of more than 4 years of experience in the industry. She started her career as Application Engineer and Solution Specialist for Autodesk Product portfolio, followed by BIM Implementation Lead & VDC Engineer for DPR Constructions, specific to AEC industry vertical. And has developed her career through past years of experience in defining BIM processes and solutions as per the for-AEC firms in India and USA. BIM consulting and implementation Building and infrastructure projects, India for a seamless project delivery was the key part of her job.

Her roles and responsibilities in Bentley comprise of delivering presentations to construction / technical personnel to advance a deeper understanding of and strategy for the implementation of BIM and Asset Lifecycle Management. She has been part of the team for BIM consulting, educating and coordinating the effort for the entire ecosystem (contractor and consultant) of Nagpur Metro Rail project. She also is instrumental the BIM Content creation pertaining to the BIM Advancement Academies in India and South-east Asia

### ANNOUNCEMENT TO NOTE

#### FEES

(Effective 1<sup>st</sup> October 2017)

#### IEM Members

- Registration Fee : **FOC**
- Administrative Fee :  
**Online: RM 15**  
**Walk In: RM 20**

#### Non-Members

- Registration Fee: **RM 50**
- Administrative Fee: **RM 20**
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my)

### PERSONAL DATA PROTECTION ACT

I have read and understood IEM's Personal Data Protection Notice published on IEM's website at [www.myiem.org.my](http://www.myiem.org.my) and I agree to IEM's use and processing of my personal data

#### CPD HOURS CONFIRMATION

Name: .....  
Membership No: .....  
Signature: .....

## 1. Introduction to BIM and its uses, Information Lifecycle (1 hour)

### CONTENT

- Current Industry Trends
  - BIM overload
  - Industry Issues
- What is BIM?
  - From Paper representation to Data Rich Asset.
  - Definition of BIM
  - From Documents to Intelligence
  - Data Liberation
- Building Information Management
  - Information Modelling or Management?
  - BIM Impacts on delivery
- International Strategies
  - UK Government Construction Strategy
  - EUBIM Taskgroup
  - Emerging International Digital Program
- BIM Users and uses
  - Asset Information Interaction
  - Right Information to Right User
  - BIM Users
  - BIM Players through life cycle
  - BIM Uses
    - Gather
    - Generate
    - Analyze
    - Communicate
    - Produce
    - Manage

## 2. Requirement Driven Delivery and Data packaging (1 hour)

### CONTENT

- Information Lifecycle
- Joining up the Life Cycle
  - Life Cycle Information Flow
  - The BInformationM Spine.
  - The Asset's Conception
  - BIM is an Information Requirement Led Process
  - Focus on Decisions Not Actions
- Decision Led Process
  - The High-Level Decision Process
  - Maturing Information
  - Progressive Information Delivery through Life Cycle Stages
  - Systematic Delivery of Information
  - Capital Project BIM Delivery Process
- Digital Plan of Work
- Decisions Driven by Plain Language Questions (PLQs)
  - Avoiding Information Silos
  - Developing the Why
  - Maturing Information - Answering Questions, Reducing Unknowns & Risk
- Information Requirements – Content
  - Information Requirements Content – Why, What, Who & How
- BIM Level 2 File Based Information and Exchange Packaging
  - Structured Data: in COBie spreadsheet format.
  - 3D Visualisations: in IFC or 3D pdf format
  - Documents & Drawings: in pdf or dwg format (extracted from the models).
- Data Packaging
  - Packaging Information – A data transport tool
  - Package Payload
  - Package Examples
    - UK COBie (Construction Operation Building Information Exchange)
    - Netherlands COINS (Construction Objects and the Integration of processes and Systems)

**Ir. Chai Chen Sing**

Chairman,

Information and Communications Technology Special Interest Group, IEM Session 2018/2019