

## Workshop Series on Lean Construction Management

# BIM Scheduling and Process Management

## INTRODUCTION

Lean Construction techniques aim to improve processes through waste minimisation. A synergy of Lean Construction and Building Information Modelling (BIM) will certainly have a profound impact on productivity and hence profitability. In this workshop, Virtual Design and Construction (VDC) is introduced as the combination of 4D BIM and lean construction management to achieve optimization of the construction schedule for continuous flow of construction process and better planning in construction management.

## OBJECTIVES

Understand VDC concept, openBIM awareness, Construction Software and hardware use within full building life cycle and how 4DBIM enhance the Design & Construction process to improve collaboration, precision and productivity. The objectives of this 2-day workshop are to allow participants to:

- Improve productivity using VDC approach in day-to-day project management
- Minimize potential abortive works to reduce project risks
- Optimize project scheduling according to resources, labour and plants
- Forecast progress and identify problems earlier
- Better visualize on construction sequence and work flow

## CONTENTS

- Introduction of Virtual Design and Construction
- Introduction of OpenBIM Concept
- Introduction of 4DBIM Planning Process in Construction Management
- 4D BIM Scheduling & 4DBIM Construction Sequence Animation with Various Tools
- Use of Laser Scanning and Drone Technology for Construction Industry
- Location Based Scheduling for Variation and Change Order
- Project Control & Optimization

## LECTURERS



### MR BENNY LIU (TRAINER), MEng(Hons) ICIOB, MbSHK, MAIIB, MHKIBIM, MIET

Mr Benny Liu is the Solutions Manager of Global Virtual Design and Construction (Singapore) Pte Ltd. He is also the BIM Team Leader of the Yau Lee Construction Co., Ltd. He has over 12 years work experience in designing and managing a variety of projects in Hong Kong and United Kingdom, ranging from commercial complex new build & refurbishment, nursing homes, office development, sports centre, residential building and university developments. Mr Liu has extensive experiences on implementing Virtual Design and Construction approach together with 4D and 5D BIM for on-site progress monitoring and schedule optimization. Mr Liu holds a Master Degree in Architectural Engineering from the University of Leeds. Mr Liu is also a Professional Member of Hong Kong Institute of Building Information Modeling (HKIBIM). A winner of Hong Kong Construction Industry Council BIM Excellence Award 2014 - Construction Innovator by BIM.



### MR MARCO WONG (FACILITATOR), MSc (Hons), BEng (Hons)

Mr Marco Wong is the BIM Engineer of Global Virtual Design and Construction (Singapore) Pte Ltd. He has extensive experience in BIM Industry. Marco is expertise in utilize and manage 3D, 4D, 5D BIM applications for different disciplines. He is familiar with production of 4D construction sequence simulations, as well as construction programme optimization and process management using various BIM technologies. Mr Wong holds a Bachelor Degree in Civil Engineering and a Master Degree in Project Management.



## DETAILS

7<sup>th</sup> Run: To be advised

Duration: 2 days

Time: 9.00am to 5.00pm

Venue: BCA Academy

Fee (incl of GST):

S\$800.00 (without subsidy)

S\$276.64\* (with WTU funding support for eligible local participants)

*Refreshments will be provided.*

*In keeping with our green and sustainable practices, course notes will be available in e-format.*

\*For more information on the funding requirement, please refer to <http://www.bca.gov.sg/manpower/wtu.html>

## AWARD

Certificate of Attendance (COA) will be awarded to participants who meet the attendance requirement.

## CPD POINTS

PEB: 12 PDUs

## TARGET AUDIENCE

- Construction Managers
- Project Managers
- Site Engineers
- Program Planners

## REGISTRATION



To register, please log into our Online StoreFront (OSF) at <https://eservices.bcaa.edu.sg/registration/#/login> or scan QR code and search for course code **78097**