

BEAM Pro / Affiliate Mandatory CPD  
綠建專才/通才持續專業發展(強制性)

Acquire maximum of  
**13 Mandatory CPD Hours**  
in total

**BEAM**  
建築環保評估協會

## Mandatory CPD Training – Intensive Training Series on Computational Modelling

Organised by BEAM Society Limited

### Session 1: Live Demonstration on Using Computation Fluid Dynamic (CFD) to Prepare Ventilation and Thermal Comfort Study for BEAM Plus Submission

2 Nov 17 (Thu) - 2:30pm - 5:30pm

**3 Mandatory CPD Hours**

The design and construction of new buildings in the centers of modern cities has become more environmental friendly in recent years. City planners, property developers and architects have to take into account many new environmental concerns such as wind comfort at the pedestrian level and thermal comfort at indoor ventilation. This seminar will have two sections. The first section will focus on the wind around buildings simulations. The second section will focus on indoor airflow ventilation. Both sections will carry out with popular advanced stimulation software “**ANSYS FLUENT**”

The seminar focuses on CFD application on both air flow around building & indoor ventilation. Throughout the live demonstration to let the developers, architects, consultants and engineers know how simulation techniques help the industries of civil and building services. The practical cases are related to the **Air Ventilitating Assessment (AVA)** and Indoor Ventilation. They will be divided into few steps including modeling, meshing, boundary conditions setting, solving, post processing etc. You will experience and learn about the handling of project with the use of advanced stimulation tools.

#### Speaker

**Mr. Raymond Chiu, General Manager**

**PERA Global (HK) Ltd.**

Raymond has over 15 years' experience in Computer-Aided Engineering (CAE) and Computational Fluid Dynamics (CFD). He has been Associate and team leader involved in management and execution of projects involving the application of CAE and CFD.

## **Session 2: Live Demonstration on the Preparation of Energy Model for BEAM Plus Submission**

10 Nov 17 (Fri) - 9:00am - 6:00pm (Lunch break: 1:00 – 2:00pm)

**8 Mandatory CPD Hours**

The focus of this seminar is to cover the workflow for creating an energy model suitable for BEAM Plus submission. The seminar will demonstrate the use of IES <Virtual Environment> software together with a sample model to run through the necessary setups for an energy modelling submission under BEAM Plus.

The seminar will first go through briefly on creating a 3D model. Then, the seminar will move into setting the thermal properties of the envelope, the operating profile, internal conditions and HVAC systems. Finally, the seminar will demonstrate on generating the necessary data for BEAM Plus submission.

Throughout the exercise, you will have a deeper understanding on what data input is required for a detail energy modelling and how to analyse the results for further optimisation. The required setup for the reference model will also be covered for carbon emission comparison.

### **Speaker**

**Mr. Jimmy Lee, Senior Application Engineer**

#### **Integrated Environmental Solutions Limited (IES)**

Jimmy attained an honours degree in Architectural Environmental Engineering from University of Nottingham. Before joining IES, Jimmy has worked in a UK consultant firm, Hoare Lea Consulting, and is responsible for carrying out different simulation exercise ranging from energy modelling, daylight analysis, solar shading analysis and thermal comfort analysis.

Upon joining IES, Jimmy took part in the business development role and has acted as a co-ordinator for consultancy service development in the Asia region.

Jimmy's latest role has been switched to be the coordinator for IES Intelligent Community Lifecycle (ICL) projects in Singapore and Hong Kong.

Jimmy has provided mentoring, technical support and training for new and existing users of the IES <Virtual Environment> for over 9 years in the Asia region.

## **Session 3: Utilizing Computational Modeling Technology to Prepare Energy Simulation and Microclimate Studies**

28 Nov 17 (Tue) - 7:00pm - 9:00pm

**2 Mandatory CPD Hours**

### **(A) Utilizing Energy Simulation**

The first part of the seminar will introduce the energy modeling technique and simulation tool application. The seminar will begin by highlighting the key elements to the energy simulation. Then, the seminar will showcase the various simulation techniques in producing the energy saving features for the energy simulation. Finally, the seminar will demonstrate the necessary steps in presenting the energy simulation result for BEAM Plus submission.

#### **Speaker**

**Ir Wai-ho Leung, Senior Engineer of Building Sustainability**

**Arup**

Wai-ho has been working for Ove Arup & Partners Hong Kong Ltd as a Sustainable Design Engineer in Building Sustainability Group. He has participated for a variety of green and sustainable design projects including commercial, institutional and recreational projects in Hong Kong and Mainland China. He is a LEED® Accredited Professional, BEAM Pro and WELL Accredited Professional, who experienced in managing green building assessment projects in Asia including China, Hong Kong, Taiwan and Korea. He involved several BEAM Plus Platinum rating in Hong Kong including Swire One Taikoo Place, Hysan Harmony, Middle Road Redevelopment etc. He has also been involved in Zero Energy Building design in the region, including the Samsung Zero Energy House in Korea and the CIC Zero Carbon Building in Hong Kong.

### **(B) Maximizing Microclimate Studies in Achieving Good Result in BEAM Plus Submission**

The second part of the seminar will demonstrate on utilizing the necessary simulation tools to conduct microclimate studies for BEAM Plus submission. The seminar will showcase the key parameters necessary to conduct microclimate studies. It will also share some of the best practices in presenting the microclimate studies result for the BEAM Plus submission.

#### **Speaker**

**Dr Tony Lam, Associate of Building Sustainability**

**Arup**

Dr Lam is an Associate of Building Sustainability of Arup. He has extensive experience in tackling environmental impacts on built environments. He is familiar with external wind environment modelling, Air Ventilation Assessment and numerical simulation for assessing the impact from various component in built environment. Tony has strong experience in energy efficient building designs and renewable energy applications, based on the fundamental knowledge in microclimate. Tony is particularly managing the Built Environment Modelling (BEM) technique for built environment, in order to achieve good thermal and visual environment, and energy performance. BEM is an integrated approach considering a number of environmental performances to provide optimised design solutions. He is also the expert in

low carbon & sustainable development for both community and building scaled projects, and has handled a number of government projects in East Asia such as Taiwan and Hong Kong. Tony is the WELL Faculty in Asia to suggest and implement the healthy & wellness building designs in East Asia region.

**Fee**

	<b>BEAM Pro, BEAM Affiliate &amp; BSL Associate / Ordinary Members</b>	<b>Member of Supporting Organisations</b>	<b>Standard (General Member)</b>
Session 1 (2 November 2017) (M-2017-11A)	HK\$600	HK\$720	HK\$900
Session 2 (10 November 2017) (M-2017-11B)	HK\$1,600	HK\$1,920	HK\$2,400
Session 3 (28 November 2017) (M-2017-11C)	HK\$400	HK\$480	HK\$600
<b>All-in-One Package (Session 1 + 2 + 3)</b> (M-2017-11P)	<b>20% Discount HK\$2,080</b>	<b>20% Discount HK\$2,500</b>	<b>20% Discount HK\$3,120</b>

**Discount will be offered to participants who register for all sessions (1 + 2 + 3). First-come-first-served.**

**Certificate / Training Materials**

e-CPD Certificate and training materials will be issued for each session by 1 month after course completion.

### Session details

Session	Date & Time	Venue	Software Used	Key Topics	Speaker
1	2 November 2017 (Thu) 2:30 - 5:30pm	Chamber 1b, Innocentre, 72 Tat Chee Avenue, Kowloon Tong	Ansys Fluent	Live Demonstration on Using Computation Fluid Dynamic (CFD) to Prepare Ventilation and Thermal Comfort study for BEAM Plus Submission	Mr. Raymond Chiu, General Manager PERA Global (HK) Ltd.
2	10 November 2017 (Fri) 9:00am – 6:00pm  (Lunch break: 1:00 – 2:00pm)	Chamber 1b, Innocentre, 72 Tat Chee Avenue, Kowloon Tong	IES Virtual Environment	Live Demonstration on Preparing Energy Model for BEAM Plus Submission	Mr. Jimmy Lee, Senior Application Engineer Integrated Environmental Solutions Limited (IES)
3	28 November 2017 (Tue) (7:00 – 9:00pm)	BEC Auditorium, G/F Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong, Hong Kong	Not Applicable	Utilizing Energy Simulation	<b>Ir Wai-ho Leung, Senior Engineer of Building Sustainability (Arup)</b>
				Maximizing Microclimate Studies in Achieving Good Result in BEAM Plus Submission	<b>Dr. Tony Lam, Associate of Building Sustainability (Arup)</b>

Remark: The content and speakers are subject to change without notification.

**Deadline for Registration:**

**Session 1 / All-in-one Package: 27 October 2017, Friday**

**Session 2: 1 November 2017, Wednesday**

**Session 3: 17 November 2017, Friday**

## Language

Cantonese with English Terminology

## Registration

Number of participants is limited and prior registration is required. Registration will be on a **first-come-first-served** basis (priority will be given to BSL members and Supporting Organisations).

For **BEAM Pro, BEAM Affiliate, BSL Associate / Ordinary Members** and **General Members**, **only registration through BSL's Online Training Portal is accepted.**

For Existing Online Training Portal Users – please [login to your Online Training Portal account](#) to apply for the course.

For New Online Users – please [register a new Online Training Portal Account](#) to apply for the course.

For **Members of Supporting Organisations**, please submit the registration form by email to [beampro.training@beamsociety.org.hk](mailto:beampro.training@beamsociety.org.hk) / by post to 1/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong, Hong Kong along with a cheque made payable to “**BEAM Society Limited**”.

Successful participants will be notified by confirmation e-mail. If the applicants have not received the confirmation e-mail 3 days before the training day, please contact BSL accordingly.

BSL reserves the right to cancel, postpone or reschedule an event due to unforeseen circumstances, including low enrolment. Should a refund be appropriate, fee paid will be refunded within 30 days.

## Supporting Organisation



## Enquiry

Please contact [beampro.training@beamsociety.org.hk](mailto:beampro.training@beamsociety.org.hk) or Tel: 3610 5729 if there is any enquiry.