# Increasing Productivity: New Developments In Construction Methods & Materials – 18<sup>th</sup> Run (Virtual Classroom)

\*\*Supported by UTAP Credit\*\*

# **Introduction**

Development projects are increasingly demanding as the clients becomes more sophisticated and requires their project to be built with better productivity and sustainability. At the same time, over the years there has being a gradual accumulation of practical experience around the world on specific methods of construction like prefabricated-prefinished volumetric construction (PPVC) and materials like self-compacting concrete (SCC) and cross laminated timber (CLT). These materials and method of construction may be considered as a means to achieve sustainability and improve productivity under the right conditions. Stakeholders (Designers, Resident Engineers, Resident Technical Officers, Site Supervisors, etc) would need to have some understanding of how these materials and method can be used as they might be handling projects involving them.

# **Objectives**

The objective of the programme is to let stakeholders understand the basic issues related to PPVC. Participants will also learn about what is SCC and the types of site/laboratory testing that can be done on SCC. The handling of CLT including connections and lifting of members together with performance attributes likes sound control and fire insulation will be shared with participants. The programme will cover the different Constituent Materials with reference to the SS544 Part 2 Concrete – Complementary Singapore Standard to SS EN 206 – Part 2: Specification for Constituent Materials and Concrete.

# Pre-requisites

Prior to attending this course, you should:

- Have a PC / laptop / tablet / smart phone with built-in or external webcam.
- Installed the Zoom client.
- Have Wi-Fi / high speed internet connection available.
- Receive an email with a link for you to submit a registration for webinar 1 week prior to the commencement.
- Receive an email with a link and password for you to join the webinar session after your registration is successful.





**IES Academy Virtual Classroom** 

### **Details**

Date : 20 JUN 2024 (Thursday) Time : 12.30pm – 7pm Duration: 6 Hrs

**Delivery Mode: Zoom Webinar** 

CPD : 6 STU(Structural) / 6 PDU / 6 PDU (CEng) (To be Confirmed)

### Course Fee (Include GST): IES Member: \$228.90 Non-member: \$272.50

E-certificate of Attendance will be awarded to participants with 100% Attendance.

## Target Audience

- Designers
- Resident Engineers
- Resident Technical Officers
- Site Supervisors

### IES Academy@Jurong East

80 Jurong East Street 21, #04-10 Devan Nair Institute for Employment and Employability Singapore 609607

Contact Person: Jerine Peh (Ms) DID: 6460 4237 | Main Line: 6463 9211 E-mail: jerine.peh@iesnet.org.sg

# **Speaker Profile**

ER. Teo Ee Huat graduated from Nanyang Technological University with a B.ENG (Civil) degree in 1996 and has since completed his MSc in Civil Engineering (NUS) and MSc in International Construction Management (NTU). He is actively involved in education and has completed his M.E.D with University of Western Australia in 2010. He is a Singapore registered Professional Engineer and Qualified Erosion Control Professional. He is currently serving as the Co-Chairman of Qualified Erosion Control Professional Panel, IES and has trained Professional Engineers as Qualified Erosion Control Professionals and also trained construction site supervisors in implementation, inspection and maintenance of Earth Control Measures. He has written papers in International journals on issues related to Construction Management and other issues.

Time	Topics Discussed
12.30pm	Prefabricated-Prefinished Volumetric Construction (PPVC)
1.30pm	Introduction to Cross-laminated timber (CLT)
2.00pm	Connections in CLT
2.30pm	Performance of CLT in Fire / Sound
3.00pm	Lifting and handling of CTL members
3.30pm	Definition and history of SCC
3.45pm	Break
4.15pm	Benefits of SCC
4.30pm	Constituent materials: Coarse aggregates
5.00pm	Constituent materials: Cements and additions
5.30pm	Constituent materials: Admixtures and fibres
6.00pm	Test for key properties of fresh SCC
7.00pm	End of programme

# **Course Outline**

# **REGISTRATION FORM**

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(Virtual Classroom) \*Supported by UTAP Credit ONLY\*

Date: 20<sup>th</sup> June 2024 (Thursday) Time: 12.30pm to 7.00pm (6 hours) Venue: Zoom Webinar CPD Programme: 6 STU (Structural) / 6 PDU (PEB) (CEng) – To be Confirmed Fees (inclusive of GST): IES Member Rate -\$228.90 Non-Member Rate - \$272.50

**Registration Closing Date:** 12 June 2024 (Wednesday) / Till Class is full (Whichever comes first) **Course Coordinator:** (Ms) Jerine Peh | Direct: 6460 4247 | jerine.peh@iesnet.org.sg

Participant's Details										
Name (as per NRIC in			NRIC				Gender:	M/F		
BLOCK Letters):			NAIC /				Gender.			
Singapore Pink Identification Card Singapore Blue Identification Card FIN/Work Permit/SAF 11B Date of Birth:										
Address (For Invoice):										
						F	Postal:			
Mobile:	Contact:				Fax:					
Email (For sending conf	irmation email):									
Company Name:	UEN No:			lo:		0	Designation:			
Please indicate:	IES Member Membership N		Non-Mem		nber		PE/RE/RTO/Safety Officer No:			
	□ Tick here if sp	onsored by company	ny 🛛 Tick here if			e if S	f Self-Sponsor			
Contact Person (For Company Sponsor Only)										
Name:	Designation:									
Mailing Address	Tal			Tel:	Fax:					
(For invoice):							1 0.			
Email:										
Payment:						Amount: \$				
WITH IMMEDIATE EFFECT, WE ARE NO LONGER ACCEPTING PAYMENT VIA CHEQUE.										
PLEASE ADOPT BANK TRANSFER/PAYNOW/AXS INSTEAD.										
E-Certificate of Attendance will be issued to participant with 100% attendance with Full payment made.										
Acceptance of Terms & Conditions for Registration of IES Academy Courses / Events										
I have read, deemed understood and accept the Terms & Conditions of IES Academy courses and events.										
Name:										
Signature:	Date:									

### **TERMS & CONDITIONS COURSE REGISTRATION**

#### **Registration**

Any registration, whether on-line or fax will be on a *first-come-first-served basis* and will only be confirmed upon receipt of full payment by IES Academy Pte Ltd unless otherwise invoice to company.

All registrations must be submitted with duly completed registration form.

#### **Closing Date & Payment**

The closing date of the event will be 1 week prior to event commencement date or earlier.

#### **Confirmation of Registration**

Confirmation of registration will be given at least 1 week before the commencement date via email. *If you do not receive the said confirmation email, you are required to contact IESA at 6463 9211 during office hours.* 

IESA reserves the right to allow only confirmed registrants to attend the Event.

#### Withdrawals/Refunds of Fees

Written notice at least 1 week in advance before the commencement of the event

Full course fee shall be refunded subjected to 4.5% transaction charge.

**NO** refund otherwise.

No show of participant would not be accepted as a valid reason for withdrawal/refund.

One time replacement is allowed only if written notice is received by us at least 1 week before the commencement of the event. However, when an IES member is replaced by a non-member, the participant has to pay the difference in the relevant fees.

#### **Cancellation/Postponement**

Changes in Venue, Dates, Time and Speakers for the Events can occur due to unforeseen circumstances. IES reserves the full rights to cancel or postpone the Event under such circumstances without prior reasons. Every effort, however, will be made to inform the participants or contact person of any cancellation or postponement.

Fees will be refunded in FULL if any Event is cancelled by IESA.

**UTAP (Union Training Assistance Programme)** is an individual skills upgrading account especially for NTUC members. As a member, you enjoy UTAP funding at 50% of the unfunded course fee capped at \$250 every year. Please visit <u>here</u> for more information on UTAP claim.

**SkillsFuture Credit (SFC)** "All Singaporeans aged 25 and above can use their \$500 SkillsFuture Credit from the government to pay for a wide range of approved skills-related courses. Visit the SkillsFuture Credit website (www.skillsfuture.sg/credit) to choose from the courses available on the SkillsFuture Credit course directory." Please click here for more information on SFC & UTAP claim.

#### PERSONAL DATA PROTECTION ACT

I consent to the processing by Institution of Engineers, Singapore of personal data, including sensitive personal data as defined in the Data Protection Act 2014, about me for the proper purposes of Institution of Engineers, Singapore (IES). I undertake to observe the provisions of the Data Protection Act 2014 in relation to any personal data I may myself hold and process as a Members of Institution of Engineers, Singapore, and I agree to indemnify Institution of Engineers, Singapore from liability for any claims or damages that may arise from the processing of this data. For more information kindly refer to: www.ies.org.sg/PDPA.

#### **Enquiries**

For further enquiries, please contact IESA general office at Tel: 6463 9211.