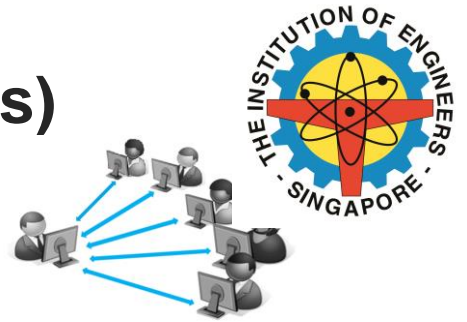


Digital Construction Part II (VDC Concept and Digital Tools)

4th Run (Virtual Classroom)

**** Supported by UTAP Credit Only****

NO Skill Future Funding



IES Academy Virtual

Introduction

As the construction industry moves into Industry 4.0 we are increasingly exposed to digital tools and related concepts to increase our construction productivity and work efficiency. New approaches to work like Integrated Digital Delivery, Virtual Design & Construction, Design for Manufacturing & Assembly etc are used for major projects and it is a matter of time when all projects adopt such approaches. Technology has advanced to allow us to use tools which we do not have access to in the past like Drones, Wearable Technologies, Internet of Things, Additives Manufacturing etc on site to enhance our productivity and efficiency. We will only be able to harness the advantages of these approaches and technologies if we understand what they are all about and how to use them.

Objectives

The objective of this program is to explain the concepts of Virtual Design & Construction. Participants will also learn about the characteristics of different types of realities technologies, mobile technologies and robotics in construction. Basic concepts on AI and machine learning, as well as blockchain and data analytics will be shared with participants. The advantages and limitations of these technologies will be shared with participants to allow them to work with these technologies if and when they are used for their projects.

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.

Details

Date : 9th April 25, (Wednesday)

Time : 12.30pm – 7.00pm

Duration: 6 hours

Delivery Mode: Zoom Webinar

CPD : 6 STU (Structural) **To be confirmed**
6 PDU (PEB) (CEng) – **To be Confirmed**

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

E-certificate of Attendance will be awarded to **Paid** participants who have completed course survey with **100% Attendance**.

Target Audience

Resident Engineers (RE)
Resident Technical Officers (RTO)

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 is a Senior Lecturer at Ngee Ann Polytechnic, specializing in Civil and Environmental Engineering. With 8 years at the Polytechnic and 7 years in the construction industry, he has experience in designing and supervising wastewater and water treatment plants, as well as working on hospitality, commercial, and transportation projects in Singapore. Additionally, he has contributed to wastewater treatment projects in Malaysia, Brunei, Bintan Island, and nearby regions.

He earned a B.Eng (Civil) degree from Nanyang Technological University in 1996 and has since completed a MSc in Civil Engineering at NUS and a MSc in International Construction Management at NTU. Committed to education, he obtained a M.Ed from the University of Western Australia in 2010.

Er. Teo is a registered Professional Engineer in Singapore and a Qualified Erosion Control Professional.

Currently, he serves as the Co-Chairman of the Qualified Erosion Control Professional Panel at IES, where he trains Professional Engineers and construction site supervisors on Earth Control Measures. He has also published papers in international journals on construction management and related topics.

COURSE SCHEDULE & OUTLINE

1. Introduction
2. Virtual Design & Construction Framework
3. Introduction to Realities (Virtual, Augmented, Mixed etc)
4. Mobile Technologies
5. Robotics in Construction
6. AI & Machine Learning
7. Blockchain & Data Analytics in Construction

Time	Description
12.30pm	Introduction / Virtual Design & Construction Framework
1.30pm	Virtual Reality / Augmented Reality
2.00pm	Mixed Reality / XR
2.30pm	Afternoon Break I
2.45pm	Mobile Technologies
3.30pm	Robotics in Construction
4.15pm	Afternoon Break II
4.30pm	AI & Machine Learning
5.45pm	Blockchain & Data Analytics in construction
7.00pm	End

REGISTRATION FORM

IES Virtual Classroom- Digital Construction Part II (VDC Concept and Digital Tools) –4th Run

**** Supported by UTAP Credit Only**** NO Skill Future Funding

Date: 9th April 2025 (Wednesday)

Time: 12.30pm to 7.00pm (6 hours)

Venue: Zoom Webinar

CPD Programme: 6 STU (Structural) – **To be confirmed** / 6 PDU (PEB) (CEng) – **To be Confirmed**

Fees (inclusive of GST): **IES Member Rate - \$228.90**

Non-Member Rate - \$272.50

Registration Closing Date: 1st April 2025 (Tuesday) / 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 BLOCK Letters):		NRIC / FIN:		Gender: M / F
Address (For Invoice):				
	Postal:		Date of Birth:	
Mobile:		Contact:		Fax:
Email (To Send Confirmation Email):				
Company Name:		UEN No:		Designation:
Please indicate:	<input type="checkbox"/> IES Member Membership No:	<input type="checkbox"/> Non-Member	<input type="checkbox"/> PE/RE/RTO/Safety Officer No:	
	<input type="checkbox"/> <i>Tick here if sponsored by company</i>		<input type="checkbox"/> <i>Tick here if Self-Sponsor</i>	
Contact Person (For Company Sponsor Only)				
Name:		Designation:		
Mailing Address (For invoice):		Tel:	Fax:	
Email:				
Payment:				Amount: \$
<ul style="list-style-type: none">Participants who achieve 100% attendance and complete their payment will receive an E-Certificate of Attendance within 7 Working days.WITH IMMEDIATE EFFECT, WE ARE NO LONGER ACCEPTING PAYMENT VIA CHEQUE.PLEASE ADOPT BANK TRANSFER/PAYNOW INSTEAD.				
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 [here](#) 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.