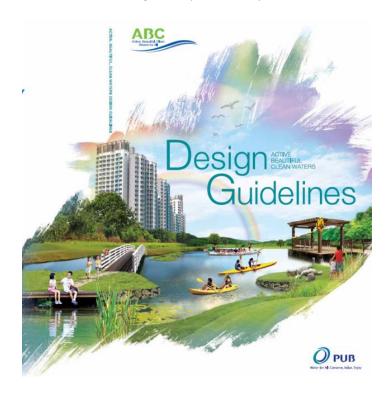


Organised By: IES Academy



Date : 21 February 2020, Friday

Time : 9.00am - 6.00pm

CPD : 5PDU; 4PDU (QECP); (All to be confirmed)

Venue : IES Academy, 80 Jurong East Street 21, #04-10

Fee : \$321.00 (IES, SIA, SILA members)

\$406.60 (Non-members)

Supported by:













INTRODUCTION

Two-thirds of Singapore functions as local catchment areas. Under the Active, Beautiful, Clean Waters (ABC Waters) Programme, PUB has embarked on a journey to harness the full potential of our waters by integrating them with our environment. Over the past 2 to 3 years, other public agencies and private developers have also embraced the ABC Waters design that leads to improvement in water quality, enhanced biodiversity and new recreational space for people to get closer to water.

To build up the expertise of industry professionals in ABC Waters design features, the ABC Waters Professional Programme was launched in Sep 2011. Comprising four core modules and four elective modules, the programme covers the concept, design, implementation and maintenance of ABC Waters design features.

Participants who complete all four core modules plus any two elective modules, and meet the registration criteria of IES/SIA/SILA, would be eligible to be registered as an ABC Waters Professional. Details on the registration criteria can be found at the websites of IES, SIA and SILA. Participants who complete any single module would receive certificate of attendance for the module completed.

In line with the revisions to the Code of Practice on Surface Water Drainage, developers/owners shall engage an ABC Waters Professional to design, oversee the construction of, and develop a maintenance plan for the ABC Waters design features. The developer/owner shall submit the concept design and design calculations, endorsed by the ABC Waters Professional, to PUB as part of their Development Control (DC) submission.

On an annual basis, developers/owners shall also submit a certificate of inspection on ABC Waters design features, endorsed by an ABC Waters Professional, if applicable. The certificate of inspection shall include a declaration on whether the features have been inspected, and are maintained satisfactorily and functioning well.



Course Outline

- ABC Waters Management Strategies –
 2 hours lecture by Mrs Ong Geok Suat
 - ➤ ABC Waters Programme
 - ➤ ABC Waters Design Guidelines
 - Understand planning, design and performance considerations for ABC Waters Management including:
 - Catchment Elements
 - o Treatment Elements
 - Collection & Storage Elements
 - Considerations on Safety, Public Health & Maintenance
 - Understand Multi-disciplinary nature of ABC Waters Management
 - > ABC Waters Certification Scheme
- 2. Integrating ABC Waters Design in Project Planning & Integration of Waterbody design in master plan and architectural concept
 - 1 hour lecture by Mr Owen Wee
 - Site Context & Analysis of Exiting Site Conditions
- Integrating ABC Waters elements into Landscape Planning Strategies
 hour lecture by Mr Koh Jiann Bin
 - > ABC Waters elements and their implementation
 - Opportunities: Activities, Aesthetics, Ecology & Bio-diversity, Access & Crossings, Education
- 4. Case Study
 - 1 hour lecture by Mr Luke Lee
 - Design Considerations of Kallang River @ Potong Pasir
 - Design calculation
 - Soil specification
 - Plant selection
 - Maintenance checklist
- 5. MCQ Exams 1 hour
- 6. Site Visit



Course Outline & Schedule

Time	Course Description	Speaker		
8.30am – 9.00am	Registration			
9.00am – 10.00am	ABC Waters Management Strategies	Mrs Ong Geok Suat		
10.00am – 10.15am	Tea Break			
10.15am – 11.15am	ABC Waters Management Strategies (continued)	Mrs Ong Geok Suat		
11.15am – 12.15pm	Integrating ABC Waters Design in Project Planning & Integration of Waterbody design in master plan and architectural concept	Mr Owen WeeMr		
12.15pm – 1.15pm	Integrating ABC Elements into Landscape Planning Strategies	Koh Jiannbin		
1.15pm – 2.00pm	Lunch Break			
2.00pm – 3.00pm	Case Study	Mr Luke Lee		
3.00pm – 4.00pm	MCQ Test			
4.00pm – 6.00pm	Site Visit	Mr Luke Lee		



Speakers' Profile

Mrs Ong Geok Suat

Mrs Ong Geok Suat graduated with a Bachelor in Civil Engineering from National University of Singapore. She also obtained a Master of Applied Science in Environmental Engineering from University of Toronto, Canada. She has over 20 years of experience in planning and designing both drainage and used waters infrastructure as well as in the operation and management of water reclamation and NEWater facilities. She is currently working in PUB. She is involved in the formulation of ABC Waters Design Guidelines, ABC Waters Certification, ABC Waters Professional Programme and pilot testing of ABC WatersDesign features. She is currently involved in the implementation of an ABC Waters Precinct in Punggol East C39, monitoring of ABC Waters pilot projects and applied R&D in catchment characterization and bioretention system.

Mr Owen Wee

Owen Wee has been working in the architecture field since graduating and has been involved in a wide range of projects that include Master Planning, public housing, private housing and NUS SDE Zero Energy Building. Since joining Surbana International Consultants , Owen has been on various projects in Singapore since then. With his vast experience and knowledge in architecture and master planning he has won the SIA GOLD design award for his involvement in the Marina South Pier as well as BCA's buildability award and BCA Barrier Free for his work for the Sengkang public housing project 'Coris II). Owen has taken on the task to drive sustainable design in Surbana since 2008. He is a Green Advocate and is registered Green Mark Professional with Singapore Building Construction Authority. His drive toward sustainability design and construction has already borne fruit with some projects obtaining higher green certifications as well as created a design guide and set minimum green targets for all projects. This drive has also resulted in more than 25,000 green homes designed in Singapore since 2008. He is now focus on Zero energy buildings in the tropics.

Mr Koh Jiann Bin

Jiannbin has devoted his consulting practice to water-sensitive design in the urban environment for the past 10 years. He has extensive technical experience with the use of nature-based solutions to treat, control, harvest and express stormwater in urban spaces and parks. With his unique combination of expertise in design and engineering, Jiannbin applies transdisciplinary thinking and adopts an integrative design approach in his practice. Some of his recent works include stormwater management design and master plan for a large national garden, the preliminary design for land use revitalisation along a canal, and ABC Waters design for various HDB greenfield developments. He has worked with such clients as the Public Utilities Board (PUB), Housing Development Board (HDB), National Parks Board (NParks), DP Architects, ARUP, SALD and SCLD. Jiannbin is a registered ABC Waters Professional and currently a member of the Active Beautiful and Clean (ABC) Waters Programme Committee. He is a full member of both the Singapore Institute of Landscape Architects (SILA) and the Institution of Engineers, Singapore(IES). Jiannbin holds a master's degree in landscape architecture and a bachelor's degree in civil engineering. He is also a CUGE Certified Practicing Horticulturist and an ISA Certified Arborist.

Mr Luke Lee

Mr Luke Lee began his career as a profession in interior design with his own design and build company. His main interest in design is to turn a volumetric space into a functional space so much as to satisfy client's needs. After many years working within a confined space, he decided to move on to a bigger volumetric space that is beyond four walls. He went for his dream and attained a Bachelor of Landscape Architecture in Lincoln University, New Zealand. Since then, he had worked as a Landscape Architect for more than ten years in landscape industry. His passions in design and accumulated technical knowledge as well as more than twenty years as an interior designer have made him a successful leader. He always possesses a strong desire in sharing his knowledge and skill to whoever he comes across. He is also an Adjunct Lecturer in BCA Academy, teaching Landscape Technology and Planting Design Management. Luke is also attained his certification as an Active, Beautiful and Clean (ABC) Waters Professional and is practicing as a professional as well as teaching in ABC Waters professional course conducted by Public Utilities Board (PUB). His passionate interest towards his work and knowledge definitely is an added value in the pursuit of excellence in design and projects.



REGISTRATION FORM – ABC Waters Professionals Course – CU 1 (13th Run)

Date	:	21 February 2020, Friday							
Time	:	9.00am to 6.00pm							
Venue (to confirm)		IES Academy							
venue (to commin)	•	80 Jurong East Street 21, #04-10							
Fees	:	\$321.00 (IES/SIA/SILA members); \$406.60 (Non-members)							
CPD Programme	:	5PDU (to confirm); 4PDU(QECP); (all to be confirmed)							
Closing Date for Registration	:	First come first served basis							
Course Coordinator	:	Joyce Foo IES Academy 80 Jurong East Street 21, #04-10 Contact: 6461 1238							
Email: joyce.foo@iesnet.org.sg									
Participant's Details Name	• .		NIDIA	C/Fin					
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*All course fees are inclusive of 7% GST, course materials and Halal refreshment. *Certificate of Attendance will be issued to participants with 100% attendance and passed MCQ Test.									
Acceptance of Terms & Conditions:									
I agree to abide by the Terms & Conditions for Registration of IES Academy's Events & Courses Name:									
Date:									
Signature:									
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ABC WATERS PROFESSIONALS COURSE – CORE MODULE CU 1

(Understanding ABC Waters Design Guidelines and Certification)

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 Engineers Singapore 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. Cheques should be crossed 'A/C payee only' and made payable to 'Engineers Singapore Pte Ltd', with the <u>Title of The Event indicated clearly</u> written on the back of the cheque, and submitted with the duly completed registration forms to:

Att: Joyce Foo

IES Academy@Jurong East

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

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.

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 visit https://www.ies.org.sg/iesa/Skillsfuture **UTAP.pdf** 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.