



Quality Insitu Concrete Construction

4th Run

Module 1 :
Ready-mix & Site Production
3pm – 6pm

Module 2 :
Transporting, Placing & Working
with Insitu Concrete
7pm – 10pm

PROGRAMME DETAILS

Date : 30 May 2013
Duration : 6 Hours
Time : 3pm - 6pm & 7pm - 10pm
Venue : To Be Confirmed
CPD Programme : 6 STUs / 6 PDUs – To Be Confirmed
Fees : \$210.00 (IES Members) \$250.00 (Non-Members)

*** Please note that attendance for both the courses are compulsory, Certificate of Attendance will be issued to participants with 75% attendance for each course**

*** Fees inclusive of 7% GST, course materials, light refreshment and dinner.**

Introduction

Insitu concrete construction are commonly found in Singapore, in the building of apartments, office and commercial buildings, port facilities, MRT stations and tunnels, bridges and flyovers, flatted factories and other structures. Insitu concrete must be well supervised in order to obtain the best out of this material and to ensure durable structures with very minimal maintenance. The task of supervising the construction of concrete structures is very much in the hands of Resident Engineers (REs) and Resident Technical Officers (RTOs). The overall objective of this series of course modules is to refresh REs and RTOs on good insitu concrete practice specifically in the areas of concrete production, transporting, placing, formwork, curing, finishing, sampling and testing.

Objective

The objective of “Module 1: Concrete and it’s production:- Ready-mix and site production” is to familiarize participants with constituents of concrete and ready-mix and site production.

Module 1: Concrete and It's Production – Ready-Mix & Site Production

Course Outline

1. Cement
2. Aggregates
3. Water
4. Admixtures
5. Concrete properties
6. Concrete specification
7. Ready mixed concrete
 - a. Batching plants
 - b. Access, delivery and discharge
8. Site batching and mixing
 - a. Storage of materials
 - b. Mixers and batching operations

Module 2: Transporting, Placing and Working with Insitu Concrete

Introduction

Insitu concrete construction are commonly found in Singapore, in the building of apartments, office and commercial buildings, port facilities, MRT stations and tunnels, bridges and flyovers, flatted factories and other structures. Insitu concrete must be well supervised in order to obtain the best out of this material and to ensure durable structures with very minimal maintenance. The task of supervising the construction of concrete structures is very much in the hands of Resident Engineers (REs) and Resident Technical Officers (RTOs). The overall objective of this series of course modules is to refresh REs and RTOs on good insitu concrete practice specifically in the areas of concrete production, transporting, placing, formwork, curing, finishing, sampling and testing.

Objective

The objective of “Module 2: Transporting, placing and working with insitu concrete” is to familiarize participants with various ways of transporting and placing insitu concrete. Other important issues such as construction joints, concreting in cold/hot weather and reinforcement will be discussed.

Course Outline

1. Transporting concrete
 - a. Pumping
 - b. Crane & Skip
 - c. Dumpers
 - d. Other methods

Course Outline – Cont'd

2. Placing & compaction
 - a. Placing
 - b. Compacting
3. Construction Joints
 - a. Location of construction joints
 - b. Preparation and concreting of joints
4. Concrete in cold/hot weather
 - a. Loss of consistence
 - b. Moisture loss
5. Reinforcements
 - a. Bar types and sizes
 - b. Handling, storage and cleanness
 - c. Cover and fixing reinforcement
 - d. Fibres

Speaker Profile

Er. Teo Ee Huat is a Course Manager in Ngee Ann Polytechnic teaching subjects related to Civil and Environmental Engineering. Among other subjects, he is currently teaching Land Surveying (Geomatics) for the Diploma in Civil & Environmental Engineering Diploma Programme. Prior to joining the Polytechnic 8 years ago, he has spent 7 years working in the construction industry involving design and supervision of wastewater/water treatment plant related projects, as well as hospitality, commercial and transportation projects in Singapore. He also worked on wastewater/water treatment development projects in Malaysia, Brunei, Bintan island and the neighboring islands.

Er. Teo Ee Huat graduated from Nanyang Technological University with a B.ENG (Civil) degree in 1996 and has since completed a MSc in Civil Engineering (NUS) and MSc in International Construction Management (NTU). He is actively involved in education and has completed a M.Ed 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.

Registration Form

Quality Insitu Concrete Construction (4th Run)

Concrete and It's Production – Ready-mix and Site Product and Transporting, Placing and Working with Insitu Concrete

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\$250.00 (Non-Members)

Please register online/fax the completed form **by 15 May 2013 before 3pm** to:

Rasheedah Goh
70 Bukit Tinggi Road
IES Building
Singapore 289758
(Tel) 6463 9211 (Fax) 6463 9468

Participant Details

Name : _____ NRIC : _____

Company : _____ Designation: _____

Address 1 : _____
(For mailing of invoice and receipt)

Address 2 : _____
(For mailing of Certificate)

Postal Code : _____ Sex : Male / Female

Mobile : _____ Fax : _____

Email : _____ (For emailing of confirmation and location map)

Please indicate : IES members IES M'ship No.: _____ P.E. No.: _____ (if applicable)
 Non-members Sponsored by company

Contact Person Details (if different from participant)

Name : _____ Designation: _____

Tel : _____ Fax: _____

Email : _____

Payment Details

Bank / Cheque No.: _____ Amount (\$): _____

* All Fees are inclusive of 7 % GST.

Cheque should be made payable to: "Institution of Engineers, Singapore" or "IES".

Acceptance of Terms and Conditions for Registrations of IES Academy's Events

I agree to abide by the Terms and Conditions for Registration of IES Academy's Events.

Name : _____ Signature : _____

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 The Institution of Engineers, Singapore (IES) unless otherwise invoice to company.

All registrations must be submitted with duly completed registration form or online submission.

Email registrations will not be accepted.

Closing Date & Payment

The closing date of the event will be 7 days prior to event commencement date. Cheques should be crossed 'A/C payee only' and made payable to 'IES', with the ***participant's name, date of event & Title of The Event indicated clearly written on the back of the cheques***, and submitted with the duly completed registration forms to: **IES Academy**

**70 Bukit Tinggi Road
Singapore 289758**

Confirmation of Registration

Confirmation of registration will be given 7 days prior to the commencement date via email. If you do not receive the said confirmation email, you are required to contact IESA general admin immediately at 6463 9211 (office).

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

Withdrawals/Refunds of Fees

Notice of withdrawal must be given in writing to IESA. Policy on refund of course fee is as follows:

- **FULL** refund if we receive your written notice of withdrawal at least 7 days before the commencement of the Event.
- **NO** refund otherwise.

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

Replacement is allowed but restricted to once only. Replacement will be allowed only if written notice is received by us at least 3 days 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 at least 3 days before the commencement date.

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.

Enquiries

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