



ACES Two-Day Workshop on Eurocode 2 Design of Concrete Structures & Eurocodes versus British Standards [4th Run]

Date: **10 & 17 Sep 2016 (Sat)**
Duration: **9.00am to 5.30 pm**
Venue: 18 Sin Ming Lane #06-01 Midview City
Singapore 573960
CPD: **14 PDUs; 12 STUs (Structural)**

ACES, JAC RE RTO:	S\$ 400 / pax
Non-Member:	S\$ 700 / pax

Synopsis

To prepare local structural engineering practitioners for the adoption of the Eurocodes in the design of reinforced concrete building structures, this 2-day workshop will approach the design of concrete building structures using Eurocodes in a comparison with BS 8110, which has been a familiar code of practice in Singapore. The workshop will contain lectures as well as hands-on tutorial sessions to provide participants with practical design experience.

Objectives

After attending the workshop, the participants will be able to:

- Appreciate the design approach based on the Eurocodes;
- Appreciate differences between Eurocode 2 (EC 2) and BS 8110 in:
 - basis of structural design and action on structures;
 - design procedures and results for beams, slabs and columns;
 - detailing requirements.
- Understand and manage design spread sheets to EC2



TRAINER: Professor TAN Kang Hai

Prof Tan Kang Hai is in the School of Civil & Environmental Engineering since Oct 1990. He received his Bachelor and PhD degrees in Civil Engineering from the University of Manchester. His research interests include structural fire engineering, strut and tie modelling of reinforced concrete structures, concrete beam-column joints, deep beams. He was consultant to HDB for upgrading of SECAD system from BS8110 to EC2.

He has published 124 top quality international journal papers. He has often been invited as a reviewer for ASCE Journal of Structural Engineering, Engineering Structures, ACI Structural Journal and Journal of Constructional Steel Research. He also serves as a member of review panel for the UK EPSRC on research proposals related to structural fire engineering. He serves as a technical committee member of a few international conferences, including co-Chairman of Structures-in-Fire 2008 International Conference. Dr. Tan is a Professional Engineer in Singapore, and is currently Director of Protective Technology Research Centre. He works closely with DSTA and MHA on structural resistance to blast and progressive collapse. He has been a consultant on concrete structures and fire resistance of structures.

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Programme

DAY 1	10 Sep 2016, Sat
8.30am	<i>Registration</i>
9.00am	<i>Session 1 A summary of essential differences between EC2 and BS8110</i>
10.15am	<i>Tea Break</i>
10.30am	<i>Session 2 Basis of Structural Design to: BS EN 1990:2002</i>
11.30am	<i>Session 3 Load combinations to: BS EN 1990:2002 & NA</i>
12.45pm	<i>Lunch</i>
1.45pm	<i>Session 4 Selecting suitable structural analysis and elements to EC2</i>
2.45pm	<i>Session 5 Treating second order effects and imperfections in EC2</i>
3.30pm	<i>Tea Break</i>
3.45pm	<i>Session 6 Flexural Design of Beams to EC2</i>
5.00pm	<i>Q & A session</i>
5.30pm	<i>End of Day 1</i>

DAY 2	17 Sep 2016, Sat
8.30am	<i>Registration</i>
9.00am	<i>Session 7 Flexural Design of Slabs to EC2</i>
10.15am	<i>Tea Break</i>
10.30am	<i>Session 8 Shear Design of Beams to EC2</i>
11.30am	<i>Session 9 Punching shear design of slabs to EC2</i>
12.45pm	<i>Lunch</i>
1.45pm	<i>Session 10 Design of stocky columns to EC2</i>
3.30pm	<i>Tea Break</i>
3.45pm	<i>Session 11 Detailing of columns, walls, beams and slabs to EC2</i>
5.00pm	<i>Q & A session</i>
5.30pm	<i>End of Day 2</i>

REGISTRATION FORM

For enquiry, please call Lilian Lean/Jennifer Quek at Tel: 6324 2682, please email your registration form to registration@aces.org.sg

Code	Topic	Trainer	Fee per pax	Re-Scheduled to
W21	ACES Two-Day Workshop on Eurocode 2: Design of Concrete Structures & Eurocodes versus British Standards [4th Run]	Prof. Tan Kang Hai	Member: \$400 Non-member: \$700	10 & 17 Sep 2016, Sat, 9am to 5.30pm

S/N	*Name	PE No.	RE No.	RTO No.	ACES M'ship No.
1.					
2.					
3.					

Company:

Address:

Postal code:

***Contact Person:**

***Mobile No.:**

***Email:**

Dietary Requirements (if any) : Vegetarian _____ no. of pax

PAYMENT

Enclosed is a Cheque No: _____ (Cheque should be made payable to **Association of Consulting Engineers Singapore** and mailed to ACES Secretariat, Association of Consulting Engineers Singapore, 18 Sin Ming Lane #06-01 Midview City Singapore 573960)

Terms and Conditions

By submitting and signing this application form, the company and individual applicant agree to the following:

- a) The company and individual applicant has read and understood the terms of the flyer (if available) and the application form.
- b) Payment for the course must be made before the course commencement date.
- c) ACES reserves the right to amend any details relating to the course, revise the course fees without prior notice, cancel or postponed the course.
- d) Request for withdrawal or replacement must be made in writing. Requests are subject to approval by ACES.
 - Written request for replacement must reach ACES before the course commencement date. There will be no additional charges for suitable replacement
 - Written request for withdrawal that reaches ACES
 - ◆ **At least At least 7 working days before course commencement: Full Refund**
 - ◆ **4 to 6 working days before course commencement: 50% of the course fee Refund**
 - ◆ **3 working days before and upon course commencement: No Refund**

To be completed by Company and Individual Applicant

COMPANY APPLICANT

Name: _____

Signature: _____

Date: _____



INDIVIDUAL APPLICANT

Name: _____

Signature: _____

Date: _____