# **REGISTRATION FORM**

**ONE DAY SHORT COURSE ON** 

### FEM IN GEOTECHNICAL ENGINEERING

Wednesday, 11<sup>th</sup> July 2018

Fax: 03-7957 7678 Email: sitiaisyah@iem.org.my Website: www.myiem.org.my

Name of Organisation:

Mailing Address:

E-mail:

_ man			
Mobile:	Tel(O):	Fax:	
Contact Person:		Designation:	
Signature:		Date:	

I / We\* wish to enrol the following person(s) for the above-mentioned Course. Details are as follows:

Name(s)	Membership No. & Grade	Fees (RM)
	Sub Total:	
	Total Amount Payable:	

## **PAYMENT DETAILS**

Enclosed herewith:

Cash (RM	)		
Cheque no.		for the amount of RM	
」 (non-refundabl	e) and made payable to '	<b>"THE INSTITUTION OF ENGIN</b>	IEERS, MALAYSIA"

account and crossed 'A/C Payee Only".

I/We\* understand that the fee is not refundable if I/We withdraw after my/our\* application is/are\* accepted by the Organising Committee but substitution of participant will be allowed. If I/We\* fail to attend the Course, I/We will still pay the registration.

#### **Terms & Conditions**

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via Credit Card]
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- For online registrations, please note that payment MUST be made before the closing date at the latest.
- If payment is not received and verified within the stipulated time, the registration fee will be reverted to the normal
  registration fee.
- FULL PAYMENT must be settled before commencement of the course; otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. Registration fee includes lecture notes, refreshment and lunches.
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

#### **Cancellation Policy**

IEM reserves the right to postpone, reschedule, relocate or cancel the Course. Cancellation of registration will not be entertained; however, replacement or substitute can be made at least 3 days prior to the event date (additional fees may be applied if grade of member is different from the initially registered grade).



Organised by: Geotechnical Engineering Technical Division, The Institution of Engineers, Malaysia

# One Day Short Course on FEM in Geotechnical Engineering

# Date/Day: 11<sup>th</sup> July 2018, Wednesday

Time: 8.30am - 6.00pm

Presenter: Assoc. Prof. (Er. Dr.) Harry Tan Siew Ann

## Venue

Hotel Armada, Lot 6, Lorong Utara C, Section 52, 46200 Petaling Jaya, Selangor Darul Ehsan

## **REGISTRATION FEE (0% GST EFFECTIVE JUNE 2018):**

Grade	<b>Normal Fee</b> (by fax & email) Payment by cash, credit card and bank-in	Online IEM Registration with Payment Fee (Log-in for registration & payment: www.myiem.org.my/member/login.aspx)
IEM Student Member	RM 250.00	RM 200.00
IEM Member	RM 400.00	RM 350.00
Non-IEM Member	RM 800.00	RM 700.00

## (Closing Date: <u>30<sup>th</sup> June 2018</u>)

BEM Approved CPD/PDP: 7.5 Hours Ref. No.: IEM18/HQ/185/C 2 Coffee Breaks and 1 Buffet Lunch will be served in a Hotel!

# **SYNOPSIS**

This short course is tailored for geotechnical practitioners (beginners to intermediate level) using FEM in geotechnical engineering. It discusses the basics of FEM and its application in geotechnical analyses as well as some case studies. The topics covered are as follows:

Session 1:	<ul> <li>Basics of FEM soil modelling, elasticity vs plasticity</li> <li>Mohr Coulomb vs Hardening Soil/Soft Soil Creep models</li> </ul>
Session 2:	<ul> <li>Determination of Soil parameters (CID and Oedometer tests)</li> <li>Pitfalls of FEM Analyses (Error to Avoid)</li> </ul>
Session 3:	<ul> <li>Drained and Undrained Analysis (illustrate with example)</li> <li>Consolidation Analysis (illustrate with example)</li> <li>Seepage Analysis (When needed and how to calibrate)</li> </ul>
Session 4:	• Deep Excavations and Slope Engineering in FEM (typical cases)

Advanced FEM for DSM models (model for tension and compression softening)

# **BIODATA OF SPEAKER**



Assoc. Prof. Harry Tan Siew Ann was a Colombo Plan Scholar who graduated from Auckland University with First Class Honors B.Eng. in 1977 as the top engineering graduate of the school. He joined NUS as a Senior Tutor and earned his M.Eng. in 1982. His M.Eng. thesis research topic is in the Geotechnical area on the excess pore pressure behavior of marine clay in reclaimed land. He was awarded the NUS Overseas Graduate Scholarship to pursue his M.Sc. and Ph.D. degrees in geotechnical engineering at the University of California at Berkeley, which he completed 1982 and 1985, respectively. He has been a staff member of the Department of Civil Engineering at the National University of Singapore (NUS) since

May 1980.

Assoc. Prof. Tan has taught courses in Geotechnical and Foundation Engineering, with post-graduate courses in Earth Retaining Structures and Deep Excavations, Slope Engineering and Groundwater Seepage and Consolidation. He has received several teaching commendation awards from the Department of Civil Engineering. For the year 2004/2005, he was given the Excellent Teacher for being amongst the best of teachers in NUS, and also the Engineering Educator Award for being the best teacher in the Department of Civil Engineering and the Faculty of Engineering at NUS.

He has published over 200 technical papers covering topics such as Deep Excavations, Pile Foundations, Geosynthetics, Ground Improvement of Soft Clays, and Land Reclamation. He serves on the editorial board of "Geotextiles and Geomembranes", of the International Society of Geosynthetics, and the Journal of "Geotechnical Engineering" of the South East Asian Geotechnical Society since 1997.

He has served as a committee member of several technical committees, including the US Transportation Research Board committee A2K06 on subsurface drainage in highway pavements, TC-09 Technical Committee on Earth Reinforcement for the International Society of Soil Mechanics and Geotechnical Engineering, SPRING Singapore technical assessor on geotechnical testing and site investigation, SPRING committee on earthworks and geotechnical engineering. Prof Tan had served as

Chairman of TR26 the new Technical Reference for Deep Excavation Works from 2005 to 2010. This code is the latest and current code for deep excavation best practice in Singapore.

He also served on the WG of BCA for the implementation of EC7 in Engineering Practice in 2014-2015, and has conducted EC7 courses in BCA Academy since 2011. In 2012 to 2015, he has conducted inhouse EC7 course for the private sector companies including AECOM, LSWCE and CPG. He was one of the Keynote Speaker for the GeoSS-BCA Seminar on Deep Foundations on 24 April 2015, focusing on the use of EC7 for pile foundation design.

Assoc. Prof. Tan has been a user of Plaxis since 1992. He was actively involved in teaching Plaxis courses in industry since 2000. He has taught the use of Plaxis in Singapore, Malaysia, Korea, India, Australia and the Netherlands over the last 10 years. He was the course leader for the 1<sup>st</sup> Asian Experienced Users Plaxis course held in Singapore in August 2003, and again in Thailand in April 2006. He serves on the Scientific Network committee for the Plaxis code development, training and applications since 2002.

He is a registered professional engineer in Singapore since 1992, and has been involved in several major consulting jobs in Singapore and Malaysia. His latest involvement is to act as leader of the State "Expert Witness Team" comprising of four international experts in the COI (Committee of Inquiry) for the Nicoll Highway tunnel LTA C824 collapse incident of 20<sup>th</sup> April 2004. He also served as the State Expert Witness for the Church Street pile foundation failure case.

He was actively involved in many deep excavation projects in both public sector and private sector cases: including many LTA projects in Circle Line, MCE, DTL1 and DTL2 stations and tunnels. He was an invited speaker at ER2010 (Earth Retention Conference at Seattle USA) for the session on case histories to address the subject of numerical analysis of retention systems for deep excavations.

Assoc. Prof. Tan also served on the GeoSS-BCA Working Group for the implementation of EC7 for Ground Investigations and Pile Foundations from Jan 2015 till present. He was one of the Keynote Speaker for the GeoSS-BCA Seminar on Deep Foundations on 24 April 2015, focusing on the use of EC7 for pile foundation design.

	PROGRAMME		
8:30am	-	8:50am	Registration
8:50am	-	9:00am	Opening Address
9:00am	-	10:45am	Session 1
10:45am	-	11:00am	Coffee/Tea Break
11:00am	-	12:45am	Session 2
12:45pm	-	2:00pm	Lunch
2:00pm	-	3:45pm	Session 3
3.45pm	-	4:00pm	Coffee/Tea Break
4.00pm	-	5.45pm	Session 4
5.45pm	-	6.00pm	Questions & Discussions
6.00pm			Closure