



**1-DAY WEBINAR
ON
“ONLINE TOOLS FOR EARTHQUAKE RESISTANT
DESIGN OF RC BUILDINGS BASED
ON THE EC8 MALAYSIA NA”**

SPEAKERS:

Prof. Nelson LAM (University of Melbourne, Australia)
Associate Prof. Hing-Ho TSANG (Swinburne University of Technology, Australia)
Ir. LIM Ek Peng (Hashim & Neh Consultants, Malaysia)
Dr. Daniel LOOI (Swinburne University of Technology, Sarawak)
Mr. Prashidha KHATIWADA (University of Melbourne, Australia)
Mr. CHAN Rong Xiang (University of Melbourne, Australia; G&P Bridges & Buildings, Malaysia)

Date : 24TH APRIL 2021 (Saturday)
Platform : **VIRTUAL Course via ‘GoToWebinar Platform’**
Time : 9.00 a.m. – 5.30 p.m.

**BEM APPROVED CPD/PDP HOURS : 5.5
IEM21 / HQ / 105 / C(w)**

FIRST-COME-FIRST-SERVE-REGISTRATION

Kindly register at www.iem.org.my

Closing Date: 19TH APRIL 2021

NO online registration will be allowed after the Closing Date

Organized & Hosted by:

Civil and Structural Engineering Technical Division (CSETD), IEM

Cancellation Policy

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

Personal Data Protection Act

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

SYNOPSIS

Malaysia has adopted Eurocode 8 (EC8) for the seismic design of building structures. The research on seismic actions and analysis methods suitable for low-to-moderate seismicity region were carried out for around a decade by a study group which was established under WG1 for the Malaysia National Annex of EC8.

The short course is hosted by members of the study group who have been in collaboration with international experts in this field to continue giving assistance to practising engineers in Malaysia over the structural design of buildings to comply with regulatory requirements on their earthquake resistance. This expert group has been hosting annual workshops in KL, Kuching and KK on a regular basis for more than ten years. Thus, many of the speakers in the short course should be well known to Malaysian engineers who have attended their workshops. This year, there are new speakers contributing to the workshop.

This short course on a webinar is aimed to introduce a few design tools that the speakers have created and were tailored to the needs of Malaysian engineers. All the tools introduced are for free access online in a webpage titled: www.quakeadvice.org.

The short course this year, which is given on webinar comprises the following components:

- 1) Determining the seismic design requirements of a site (expressed in terms of a design response spectrum) based on its location and site conditions as reflected in the borelog records;
- 2) Independent seismic response analysis of a building as obtained from dynamic analyses for checking against output from a commercial software; and
- 3) Ductility design of reinforced concrete in compliance with DCL and DCM requirements as prescribed by Eurocode 8.

The online tools are to give assistances over different aspects of the seismic design process covering each of the three topics that are outlined in the above.

SPEAKERS



Nelson Lam is Professor and leader of the Structures and Buildings Discipline in Department of Infrastructure Engineering at The University of Melbourne. He has 36 years of experience in structural engineering, and has been working in the specialized field of earthquake engineering, impact dynamics and structural dynamics in the past 29 years. He is member of the Seismic and Dynamic Events Panel commissioned by the London Headquarter of The Institution of Structural Engineers and also member of the standing committee for future revisions to the Australian standard for seismic actions. His achievement in research in this field was recognized by the award of the Chapman Medal (1999) and Warren Medal (2006) by

Engineers Australia; and Chapman Medal for the second time in 2010, and for the third time in 2020. He is also recipient of Award for Teaching Excellence given out by Engineers Australia in 2012 and Academic Staff Teaching Award by Melbourne School of Engineering in 2013. He is lead author of the professional guidebook titled Design of Buildings and Structures in Low to Moderate Seismicity Regions which was launched in June this year. The book can be accessed free online using this link: <https://www.polyu.edu.hk/cnerc-steel/publications.html>. Nelson's early career as a structural engineer was with Scott Wilson International throughout the 1980's and attained British chartered engineer status during that period. He was awarded the degree of BSc in civil engineering with first class honours at the University of Leeds, England in 1981, MSc degree in concrete structures at Imperial College of Science & Technology, London in 1982 and PhD in earthquake engineering at The University of Melbourne in 1993.



Dr. Hing-Ho Tsang is Associate Professor at Swinburne University of Technology, Australia. He lectured at The University of Hong Kong from 2007 to 2012, and was a Visiting Professor at Karlsruhe Institute of Technology, Germany, in 2013 and 2016. He has published over 200 research articles and his scholarly achievements have been recognised by a dozen of international research awards and university prizes or fellowships. He has recently been listed amongst World's Top 1% Scientists in 2019 in Civil Engineering in the Science-wide Author Databases of Standardized Citation Indicators. He is a Chartered Professional Engineer

(CPEng) and has been a specialist consultant for major infrastructure projects nationally and internationally. He serves in advisory roles to governments, industry and professional bodies, leading to the development of design standards and guidelines globally.



Ir. EP. Lim is a practising Professional Civil & Structural Engineer with Perunding Hashim & NEH Sdn. Bhd. He has over 35 years of experience in civil & structural engineering design and construction. He was a member of technical committees of (IEM-SWO) for standards in Design of Concrete Structures for MS EN 1990, 1991, 1992 & was a member of IEM C&S WG1 for drafting of Malaysia National Annex of EC8.



Dr. Daniel Looi is Senior Lecturer and Course Coordinator at Swinburne University of Technology (Sarawak campus), Malaysia. He is a Chartered Professional Engineer (Structural) of Engineers Australia and a frequent speaker for IEM seminars. He specialises in the field of structural and earthquake engineering. He is a key contributor to the development of the National Annex to Eurocode 8 on the seismic design of building structures for Malaysia. His research in concrete structures was recognised by the HKIE Outstanding Paper Award for Young Researcher/Engineer (2015). Daniel has published research work in seismic engineering, concrete mechanics, modular building and fastening technology. Daniel worked as a structural application engineer in a multi-national company, specialised in structural analysis and design computation for buildings and plant. He was trained by the late Ir. MC Hee in his early career as a structural engineer. He is an alumnus of the Civil Engineering Department, University of Hong Kong and University of Malaya.



Mr. Prashidha Khatiwada is a structural engineer working in the field of earthquake engineering, and dynamic analysis. He is a programmer and developer of the online program at Quake Advice. He was awarded the MEng degree in Structural Engineering with distinction at The University of Melbourne in 2019. He has over two years of experience in Structural Design, Earthquake Damage Assessment and Structural Health Monitoring, and Earthquake Resisting Design.



Mr. Chan Rong Xiang is a structural engineer who graduated from The University of Melbourne in 2020, with an MEng degree. His final year project is to analyse multi-storey buildings when subjected to earthquake ground shaking. He is now working at G&P Bridges & Buildings Sdn. Bhd.

PROGRAMME

TIME	PROGRAMME	SPEAKER
0830 – 0900	Registration of Participants – Please log in using the IEM’s Invitation Email Link that will be emailed. <i>(NO sharing of link as ‘invitation link’ designated for REGISTERED EMAIL ONLY)</i>	
0900 – 0905	Welcome Address & Opening Speech	CSETD
0905 – 0915	Introductory Session: Overview in Seismic Analysis and Design for Buildings as Per EC8	Prof. Nelson Lam
0915 – 0945	Session 1: Recap on “Site Classification and Design Response Spectrum Stipulated by the Malaysian EC8 NA”	Dr. Hing-Ho Tsang
0945 – 1015	Program #1: Site Natural Period Calculator and Response Spectrum Generator	Mr. Prashidha Khatiwada
1015 – 1045	Q & A Session 1	
1045 – 1100	<i>Morning Break</i>	
1100 – 1145	Session 2: Recap on “The Generalised Force Method (GFM)”	Prof. Nelson Lam
1145 – 1215	Program #2: Rapid Dynamic Analysis Engine	Mr. Chan Rong Xiang
1215 – 1230	Q & A Session 2	
1230 – 1345	<i>Lunch Break</i>	
1345 – 1430	Session 3: Recap on “RC Column and Shear Wall Detailing for DCL and DCM”	Dr. Daniel Looi
1430 – 1500	Program #3a: EC8 DCM Detailing Optimiser (column) Program #3b: EC8 DCM Detailing Optimiser (shear wall)	Mr. Prashidha Khatiwada
1500 – 1515	Q & A Session 3	
1515 – 1530	<i>Afternoon Break</i>	
1530 – 1600	Sharing session by practicing engineer: Recap on the "Analysis and design considerations of an building example of applying EC8 and the Malaysia NA"	Ir. EP Lim
1600 – 1630	Q & A	
1630 – 1700	Closing Session:	Prof. Nelson Lam
1700	End of Webinar	

{PLEASE LOG IN WITH THE LINK PROVIDED BEFORE 9.00 A.M. ON THE DAY OF EVENT}

**“IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion”.
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For further details, kindly contact:

The Institution of Engineers, Malaysia
Bangunan Ingenieur, Lots 60/62, Jalan 52/4, P.O. Box 223 (Jalan Sultan),
46720 Petaling Jaya, Selangor
Tel: 603-7968 4001/2 **Fax :** 603-7957 7678 **Email :** shahrul@iem.org.my

REGISTRATION FORM

1-DAY WEBINAR ON "ONLINE TOOLS FOR EARTHQUAKE RESISTANT DESIGN OF RC BUILDINGS BASED ON THE EC8 MALAYSIA NA" – organised by CSETD
24TH APRIL 2021 – Saturday (Via GoToWebinar PLATFORM)

Fax: 03-7957 7678

Email: shahrul@iem.org.my

REGISTRATION FEE : 6% SST EFFECTIVE 01ST MARCH 2019 & (HRDF Claimable)

~~EARLY BIRD FEES (10% DISCOUNT) for Registration & Payment BEFORE 01ST APRIL 2021~~

	Early Bird Fees (until 05 APRIL ONLY)	Virtual Online Fee	Virtual Normal Fee
Student Member	67.50	75.00	90.00
Graduate Member	112.50	125.00	150.00
Corporate Member	180.00	200.00	225.00
Non IEM Member	432.00	480.00	540.00

No	Name(s)	IEM Membership No.	Grade	Fee (RM)*
SUB TOTAL				
<i>Please ADD + 6% SST</i>				
TOTAL PAYABLE				

PAYMENT DETAILS :

Cash RM _____

Cheque No. _____ for the amount of RM _____ (non-refundable) and made payable to
"THE INSTITUTION OF ENGINEERS, MALAYSIA" and crossed 'A/C Payee Only'. Bank Account No. : 640320010020215,
Bank Name: Alliance Bank Malaysia Berhad. (ALL PAYMENT MUST INCLUDE SST 6%) SHOULD PAYMENT IS MADE, KINDLY EMAIL THE 'BANK-IN-SLIP' TO IEM FOR VERIFICATION BEFORE THE EVENT FOR EASY REGISTRATION)

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails 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. The Registration Fee includes Handout (whichever available).

For **ONLINE REGISTRATIONS**, please note that **PAYMENT MUST be made BEFORE the CLOSING DATE.** If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

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Date

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- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via RHB and Maybank2u – Personal Saving & Personal Current ; Credit Card - Visa/Master.
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- 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 to avoid disappointment.