



## Symposium on Structural Design and Analysis for Lateral Stability of Prefabricated and Modular Construction

Organised by  
Department of Civil Engineering, The University of Hong Kong  
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Prefabricated and modular construction has many benefits such as improving the quality of construction, saving time and costs, reducing site accidents, and benefiting the environment through reuse of modular units and reduction of waste. There is a growing trend in modern construction of both buildings and bridges around the world moving into prefabrication. With this form of construction, ensuring lateral stability in conditions in a rare and severe event is a major challenge to structural engineers in both the design and supervision of construction. This one-day symposium aims to introduce effective and economical methods of design and construction to counter the destabilising actions of a prefabricated, or modular, structure when subject to strong wind and intense earthquake ground shaking. As shown in the itinerary, both bridges and buildings are covered in the lectures. Much of the course material is original, as was prepared specifically for this symposium. All three speakers are well-known international experts in the field, and are all experienced with knowledge transfer to practising professionals.

**WHO SHOULD ATTEND:** This course is suitable for civil and structural engineers working at different levels from graduate engineers to supervising senior / chief engineers, checkers, regulators and code drafters who want to acquire a sound fundamental understanding of the key principles on this subject in order to effectively exercise their respective professional duties that are associated with the engineering of structures.

### Expert Speakers:

Professor Francis Au – Head of AIS Academy and Technical Advisor, Asia Infrastructure Solutions. Honorary Professor and Former Head, Department of Civil Engineering, The University of Hong Kong, BSc (Eng), MSc (Eng), PhD, FHKIE, FIStructE, FICE, RPE(CVL, STL), CEng,

Professor Nelson Lam - Professor and Leader of Structures and Buildings Discipline, Infrastructure Engineering, The University of Melbourne, Australia. BSc, MSc, DIC, PhD, FIStructE, FIEAust, MICE, CEng.

Dr Tharaka Gunawardena - Research Fellow and Principal Instructor to Melbourne University hosted industry short courses on *structural design of prefabricated and modular building construction*, Infrastructure Engineering, The University of Melbourne, Australia. BEng, PhD.

### Continuing Professional Development Credits:

The course is considered suitable for 1 CPD-day credit.

\* A 'Certificate of Attendance' will be issued to those who attend the registered sessions.

**Dates:** Monday 6, May 2024 (9:00 a.m. - 5:20 p.m.).

**Course Venue:** Chow Yei Ching Building, Main Campus, G/F - CBA, The University of Hong Kong.

**Course Fee:** HK\$ 1500 (including course note, a 1 CPD-day 'Certificate of Attendance'\*, and two coffee breaks) (Non-refundable).

**Enquiries:** All enquiries about this professional course should be addressed to Mr. Chen Jiajun, Rm 618, Haking Wong Bldg, Department of Civil Engineering, The University of Hong Kong at +852 6093 4379 (Email: junjames@connect.hku.hk).

THE UNIVERSITY OF HONG KONG  
DEPARTMENT OF CIVIL ENGINEERING

One Day Symposium on

**Structural Design and Analysis for Lateral Stability of  
Prefabricated and Modular Structures**

Course Venue: Chow Yei Ching Building, Main Campus, G/F - CBA, HKU.

**COURSE PROGRAMME**

**Monday 6 May 2024**

8:45 am - 9:00 am - Registration

9:00 am - 9:05 am - Opening by organizer of symposium from University of Hong Kong

9:05 am – 9:15 am - Introduction to the One Day Symposium (Prof Nelson Lam)

9:15 am - 10:15 am - Design of post-tensioned precast concrete bridge piers (Prof Francis Au)

10:15 am - 10:30 am - Morning Tea & Coffee

10:30 am - 11:30 am - Design of post-tensioned precast concrete bridge piers (Prof Francis Au)

11:30 am - 12:15 pm - Design of modular buildings for lateral stability (Dr Tharaka Gunawardena)

12:15 pm - 14:00 pm - Lunch

14:00 pm - 15:15 pm - Design of modular buildings for lateral stability (Dr Tharaka Gunawardena)

15:15 pm - 15:30 pm - Afternoon Tea & Coffee

15:30 pm - 17:10 pm - Design of post-tensioned high rise modular buildings (Prof Nelson Lam)

17:10 pm - 17:20 pm - Summary and Feedbacks (Prof. Nelson Lam)

## REGISTRATION FORM

To: Mr Chen Jiajun, Course Secretariat

Please register me / us for the following professional course:

### Structural Design and Analysis for Lateral Stability of Prefabricated and Modular Structures

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Time: 8:45 a.m. - 5:15 p.m.

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Course Fee: HK\$ 1500

Please complete in **ENGLISH** (in **BLOCK LETTERS**)

	Surname	Given Name	Name of Company	Telephone	Email Address	Need Hardcopy of Course Note (Y/N)
1						
2						
3						
4						
5						

Registration Fee	Number of Persons	Total
HK\$ <u>1500</u> per person		HK\$

The registration fee includes course note, a 1 CPD-day 'Certificate of Attendance', a lunch buffet, and two coffee breaks. The 'Certificate of Attendance' will be issued to those who have attended all sessions. Note that **ONLY** softcopy of the course note will be provided unless requested in the above form. The download link will be provided in the due course.

All payments are non-refundable.

Please send the completed registration form with a crossed cheque made payable to "**The University of Hong Kong**":

*Mr Chen Jiajun, Course Secretariat  
Department of Civil Engineering, The University of Hong Kong, Pokfulam Road, Hong Kong*

Please note that registration will only be confirmed upon receipt of payment and on a first-come-first-served basis. **DO NOT** send any cash in the post. The official receipt for the registration fee will be distributed on the days of the course.

Contact: Mr Chen Jiajun, Rm 618, Haking Wong Bldg, Department of Civil Engineering, The University of Hong Kong at +852-6093 4379, Email: junjames@connect.hku.hk

Enclosed Cheque No.: \_\_\_\_\_ Bank: \_\_\_\_\_