



ASSOCIATION OF
CONSULTING ENGINEERS
SINGAPORE



ACES-BCA SEMINAR

**NEW
GUIDE**

**DESIGN GUIDE FOR FIBRE-REINFORCED
CONCRETE STRUCTURES TO SINGAPORE
STANDARD SS 674:2021**

- PRACTICAL EXAMPLES AND DESIGN AIDS

31 OCTOBER 2025

9 AM TO 1 PM

 **AUD302, NTU@ONE-NORTH**
11 SLIM BARRACKS RISE,
SINGAPORE 138664

 **CPD : PDU TO BE ADVISED**

 **S\$65 NETT PER PERSON**

*EACH REGISTERED PARTICIPANT WILL
RECEIVE A HARD COPY OF THE GUIDE BOOK.*

*SEATS LIMITED TO 215.
FIRST-COME, FIRST-SERVED*



**REGISTRATION
[LINK](#)
OR
QR CODE**



SYNOPSIS

This NEW Guidebook (Oct 2025) is intended to supplement the Design Guide for Fibre-Reinforced Concrete Structures to Singapore Standard SS 674:2021 (published in September 2022), by further providing practical design examples and design aids.

The seminar will focus on design requirements, and showcase several practical examples, as given in the new design guide. It also provides the opportunity for participants to clarify on the design aspects for FRC structures.

SEMINAR PROGRAMME

8.30am	Registration
9.00am to 9.15am	Opening Address by ACES President, Er. Chuck Kho Acknowledgement of Sponsors & Presentation of Autographed Guidebook
9.15am to 10.30am (75mins)	Session 1 – Design Requirements & Design Aids: Material strengths; Design for bending with or w/o axial force; Design for shear and punching; Serviceability Limit States; Design with strut-and-tie models.
10.30am to 11.00am	Tea Break
11.00am to 1.00pm (120mins)	Session 2 - Practical Design Examples (Selective): Slab-on-grade; Foundation slabs; Foundation beams; Crack control in thick basement slabs; Precast tunnel segmental linings; Pile caps; Box culverts; Bored piles; Suspended slabs. Q&A
1.00pm	End of Seminar

ABOUT SPEAKER

Tan Kiang Hwee is Emeritus Professor at the National University of Singapore (NUS). He obtained his doctorate degree from the University of Tokyo, Japan in 1985. He specializes in the area of structural concrete and composites and has taught courses in structural concrete design at both undergraduate and postgraduate levels. He has carried out extensive research on concrete beams with transverse openings, external prestressing, fibre-reinforced concrete, and fibre-reinforced polymer (FRP) systems.



He has published more than 300 refereed technical papers, a book entitled “Beams with Openings: Analysis & Design” (CRC Press LLC, USA, 1999), “Design Guide for Fibre-Reinforced Concrete Structures to Singapore Standard SS 674:2021” (Association of Consulting Engineers Singapore, 2021) and edited the proceedings of the 6th International Symposium on FRP Reinforcement for Concrete Structures (World Scientific, 2003). He was awarded the Frederick Palmer Prize 2021, by the Institution of Civil Engineers (ICE), UK, for the best paper in structural design.

He serves as the Chairman for Singapore Standards Council’s Technical Committee on Structures and Sub-Structures and is a member of the Investigation Panel for Professional Engineers Board, Singapore.