

# Scaffold Design Basics and Safety

by Dr. N. Krishnamurthy

## Introduction

Although Singapore has improved its safety record considerably in the last decade, many accidents continue to cause injuries and claim lives. One of the common accident sources is scaffolding, the temporary work platform and support needed to erect a permanent structure. Most workplace accidents involve scaffolds in terms of structural collapse or of personnel being injured during the erection, use and dismantling of scaffolds.

This course will cover the common types and systems of scaffolds in Singapore, and discuss the characteristics of scaffolds and other temporary structures as against the permanent structures they help to build, to understand the reasons for special care of scaffolds.

Without going into actual design, the course will present the basics of structural behaviour so that participants can appreciate the vulnerable aspects of scaffolds. It will also identify the various hazards while working with and on scaffolds, and various safeguards against accidents and injuries from scaffold work.

## Objective

To prepare site personnel to become aware of the importance of details during scaffold erection, use and dismantling, in relation to proper documentation of SWPs, incidents, etc. and direct and continuous monitoring of scaffolds and workers on them

## Target Audience

- All workplace safety personnel, in particular those who are involved with design, erection, and supervision of scaffolds.
- Developers, designers, project managers, engineers, supervisors.

## PROGRAMME DETAILS

Date : 28 JAN 2019 (Monday)  
Duration : 1 Day  
Time : 9.00 am – 4.30 pm  
Venue : Devan Nair Institute  
80 Jurong East St 21  
Singapore 609607 (To confirm)

Organizer : IES Academy

CPD Programme : 6 SDU /  
3 STU (STRUCTURAL) /  
2 STU (SAFETY)  
6 PDU – All to be confirmed

Course Fees\* : \$246.10 (IES Members)  
\$288.90.00 (Non- Members)

- Fees inclusive of 7% GST, course materials and Refreshment.
- Limited seats available (first-come-first-served-basis)
- Certificate of Attendance will be given to participants with 100% attendance.

## Course Content

- The scaffold as a structure – Types and characteristics – Need for special care
- Structural behaviour – Modes of failure – Buckling and sway – Bracing
- Causes of failure – Hazards during scaffold erection, use, and dismantling – Falls
- Scaffold regulations – Safety measures – Case Studies of scaffold accidents

## Speaker's Profile



Dr. N. Krishnamurthy completes 56 years of teaching, research, and consultancy experience in structural engineering, computer applications, workplace safety and risk management in USA, India, and Singapore. He has three solo books (including 'Introduction to Risk Management') and four co-authored books and a hundred papers to his credit.

In Singapore, Prof. Krishna has focused on workplace safety and health, studying and conducting research sponsored by MOM, WSHC and WSHI of Singapore. He has investigated workplace and other accidents both on behalf of MOM and private parties, and has appeared as expert witness in some court cases.

# Registration Form

## Scaffold Design Basics and Safety 10th Run

**Date:** 28 JAN 2019 (Monday)  
**Duration:** 1 Day  
**Time:** 9am – 4.30pm  
**CPD Programme:** 6 SDU / 3 STU (STRUCTURAL) / 2 STU (SAFETY) - Are Confirmed  
6 PDU - To be Confirmed  
**Venue:** IES Academy @ Jurong East  
**Course** \$246.10 (IES Member)  
**Fee:** \$288.90 (Non-member)  
**Course** Verline Chiam  
**Coordinator:** 64604241  
verline.chiam@iesnet.org.sg  
**Last Date of Registration:** 18 JAN 2019

### Participant Details

\*Name (as per NRIC): \_\_\_\_\_ \*NRIC/FIN No: \_\_\_\_\_  
\*Designation: \_\_\_\_\_ RE/RTO/PE No: \_\_\_\_\_  
Company: \_\_\_\_\_  
\*Address: \_\_\_\_\_  
\*Email: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
\*Contact No: \_\_\_\_\_ Fax: \_\_\_\_\_  
Please Indicate:  IES Member No: \_\_\_\_\_  
 Non-member  Vegetarian

### Contact Person (HR or Finance if sponsored by company or if applicable)

Name: \_\_\_\_\_  
Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_  
Address: \_\_\_\_\_

### Payment Details

Nets / Cheque No: \_\_\_\_\_ Amount: \_\_\_\_\_  
 Sponsored by company  
• All fees inclusive of 7% GST  
• Cheques should be made payable to "Engineers Singapore Pte Ltd"

**Name:** \_\_\_\_\_ **Signature** \_\_\_\_\_

## **TERMS & CONDITIONS COURSE REGISTRATION**

### **Registration**

Any registration, whether on-line or fax will be on a ***first-come-first-served basis*** and will only be confirmed upon receipt of full payment by Engineers Singapore Pte Ltd unless otherwise invoice to company.

All registrations must be submitted with duly completed registration form.

### **Closing Date & Payment**

The closing date of the event will be 1 week prior to event commencement date or earlier. Cheques should be crossed 'A/C payee only' and made payable to '**Engineers Singapore Pte Ltd**', with the **Title of The Event indicated clearly written on the back of the cheques**, and submitted with the duly completed registration forms to:

Att: Verline Chiam

**IES Academy@Jurong East**

Devan Nair Institute for Employment and Employability,

80 Jurong East Street 21, #04-10

Singapore 609607

### **Confirmation of Registration**

Confirmation of registration will be given at least 1 week before the commencement date via email. ***If you do not receive the said confirmation email, you are required to contact IESA at 6463 9211 during office hours.***

IESA reserves the right to allow only confirmed registrants to attend the Event.

### **Withdrawals/Refunds of Fees**

Written notice **at least 1 week in advance** before the commencement of the event

Full course fee shall be refunded subjected to **4.5% transection charge.**

➤ **NO** refund otherwise.

No show of participant would not be accepted as a valid reason for withdrawal/refund.

One time replacement is allowed only if written notice is received by us at least 1 week before the commencement of the event. However, when an IES member is replaced by a non-member, the participant has to pay the difference in the relevant fees.

### **Cancellation/Postponement**

Changes in Venue, Dates, Time and Speakers for the Events can occur due to unforeseen circumstances. IES reserves the full rights to cancel or postpone the Event under such circumstances without prior reasons. Every effort, however, will be made to inform the participants or contact person of any cancellation or postponement.

Fees will be refunded in FULL if any Event is cancelled by IESA.

**UTAP (Union Training Assistance Programme)** is an individual skills upgrading account especially for NTUC members. As a member, you enjoy UTAP funding at 50% of the unfunded course fee capped at \$250 every year.

**SkillsFuture Credit (SFC)** "All Singaporeans aged 25 and above can use their \$500 SkillsFuture Credit from the government to pay for a wide range of approved skills-related courses. Visit the SkillsFuture Credit website ([www.skillsfuture.sg/credit](http://www.skillsfuture.sg/credit)) to choose from the courses available on the SkillsFuture Credit course directory."

Please visit [HERE](#) for more information on SFC & UTAP claim

### **PERSONAL DATA PROTECTION ACT**

I consent to the processing by Institution of Engineers, Singapore of personal data, including sensitive personal data as defined in the Data Protection Act 2014, about me for the proper purposes of Institution of Engineers, Singapore (IES). I undertake to observe the provisions of the Data Protection Act 2014 in relation to any personal data I may myself hold and process as a Members of Institution of Engineers, Singapore, and I agree to indemnify Institution of Engineers, Singapore from liability for any claims or damages that may arise from the processing of this data. For more information kindly refer to [HERE](#)

### **Enquiries**

For further enquiries, please contact IESA general office at Tel: 6463 9211.