



IEM

The Institution of Engineers, Malaysia

PHYSICAL TWO DAY COURSE ON **DESIGN OF SPRINKLER SYSTEMS- MS1910** -PRE-CALCULATED ORDINARY HAZARD (OH) & HIGH HAZARD STORAGE (HSS)

SPEAKER;
Ir. GARY LIM ENG HWA



Date : 11th & 12th November (Wednesday & Thursday)



Venue : METD Lecture Room, 2nd Floor Wisma IEM, PJ



Time : 9.00 a.m.–5.30 p.m.



BEM Approved CPD Hours: 13
Ref. No.: IEM26/HQ/502/C



Closing Date: 4 November 2026

NO online registration will be allowed after the Closing Date



Organized by:
Building Services Technical Division (BSTD), 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.

"IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion".

SPEAKER



Ir. GARY LIM ENG HWA

BE (Mech.) NZ, Mgt Dip. FIEM, P.Eng, AT31000
(Approved ISO31000 Risk Management Lead Trainer)

Gary is a member of the Building Services Technical Division, Safety in Engineering Special Interest Group and the Fire Advisory Board. He is a Professional Engineer registered with the Board of Engineers, Malaysia and a Fellow of the Institution of Engineers, Malaysia (IEM). In 2016 he obtained Approved ISO31000 Risk Management Lead Trainer Certificate from G31000 Institution. He has a degree in Mechanical Engineering from the University of Canterbury, New Zealand and a Management Diploma from New

His company is registered with HRDCorp as Training Provider, so he conducts courses regularly on DOSH subjects and the concepts and design in the area of Fire Protection, Plumbing and Sanitary systems. In the area of risk management he conducts courses on Enterprise Risk Management & Business Continuity Management.

SYNOPSIS

LEARNING KEY OUTCOME

Artificial Intelligence (AI) is currently an in-thing but this IS NOT new in the field of engineering where software was developed long before AI. Technical criteria input as required by the software outcome the design of the fire protection systems of a building. It has been said that AI does not provide 100% solution therefore there is a NEED to conduct SANITY CHECK this is where the services of Engineers are still required. This course is to provide the Fundamentals engineering principles so young Engineers can carry out such sanity check! At the end of the training course, participants would be able to:



Understand the history of sprinkler and it's development to modern time;



Know the types of sprinkler heads and its application



Understand the various sprinkler systems available to meet certain situation or application



Able to design Pre-Calculated System for Ordinary Hazard (OH), High Hazard Storage (HHS)/Process (HHP) and In-Rack Sprinkler systems



Case study for each of the above OH, HHS, HHP and In-Rack Sprinkler Systems



Note: Participants are required to bring along a scientific calculator.

Max 25 participants being a participative course with case studies, first come first serve basis.

PROGRAMME

TIME	DAY 1	DAY 2
9.00am	History and Development of Sprinklers and Its Systems	MS1910-Pre-calculated sprinkler design – Ordinary Hazard (OH) Case studies of 1 stage and 2 stage installation
10.15am	Compute Effective Sprinkler tank capacity	
10.45am	Tea Break	Tea Break
11.00am	Types of Sprinkler Systems – Applications	MS1910-Pre-calculated sprinkler design – High Hazard (HHS) – Storage Case Study
11.45am	Sprinkler System – Components like Heads, Types, Uses	MS1910-Pre-calculated sprinkler design – High Hazard (HHP) – Process Case Study
12.30pm	Lunch	Lunch
1.30pm	Fundamental of Fluid Dynamics Exercises to apply the formula	Pre-calculated sprinkler design – Ceiling and In-Rack Case study
2.45pm	Identification of Fire Hazards – Commodity Classifications	
3.30pm	Tea Break	Tea Break
3.45pm	Sprinkler – location, spacing, position rules, blockage by beams	Hydraulic calculation of Ordinary Hazard compared with Pre-Calculated System
5.00pm	End of session	End of session

For further details, kindly contact:

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REGISTRATION FORM

PHYSICAL TWO DAY COURSE ON DESIGN OF SPRINKLER SYSTEMS-MS1910- PRE-CALCULATED ORDINARY HAZARD (OH) & HIGH HAZARD STORAGE (HSS)

11th & 12th Nov 2026

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Category	Online Fee	Normal Fee
Student Member	RM250.00	RM 300.00
Graduate Member	RM 500.00	RM 600.00
Corporate Member	RM 800.00	RM 900.00
Non IEM Member	RM 1600.00	RM 1700.00

No	Name(s)	Membership No.	Grade	Fee (RM)*
SUBTOTAL				
PLEASE ADD 8% SST				
TOTALPAYABLE				

PAYMENT DETAILS:

☐ Cash RM _____

☐ Cheque No. _____ for the amount of RM _____

(name in s dital) and made payable to 'THE INSTITUTION OF
ENGINEERS, MALAYSIA' and crossed 'A/C Payee Only'.

(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 reserved/cancelled or intended participant fails to attend the course, the fee is not refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE** the closing date. Payment is not receivable within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Person : _____

Designation : _____

Name of Organization : _____

Address : _____

Telephone No. : _____ (O)

Fax No : _____ (O)

Handphone : _____ (HP)

Email : _____

Signature & Stamp

Date

TERMS & CONDITIONS:

- 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 as to avoid disappointment.