

PHYSICAL 2 DAYS SEMINAR ON

PROCESS ENGINEERING FOR OTHER ENGINEERS, SCIENTISTS & MANAGERS

BEM APPROVED CPD: 15

REF NO: IEM25/HQ/444/S

ORGANISED BY: CHEMICAL ENGINEERING TECHNICAL DIVISION, IEM

Date : 26 & 27 November 2025 (Wednesday & Thursday)
Time : 9.00 am - 6.00 pm
Venue : Wisma IEM, PJ
Speaker : Ir. Dr. Eow John Son



HRD Corp Serial No:
Applying

Approved Duration:
Applying

REGISTRATION FEE'S (subject to 8% SST)

	ONLINE FEE (NON HRDF Claimable) (Log-in for registration & payment: www.myiem.org.my/member/login.aspx)	NORMAL FEE (HRDF Claimable) (By Email : Payment by cash, credit card, Quotation & Invoice)
IEM Student Members	280.00	330.00
IEM Graduate Members	600.00	650.00
IEM Corporate Members	900.00	950.00
Non-IEM Members	1700.00	1750.00

I. SYNOPSIS

A practical 2-day Workshop covering Chemical & Process Engineering concepts and knowledge for other engineers, scientists and managers working in the oil & gas, chemical process, pharmaceutical, manufacturing, petrochemical industries, etc. The participants will gain the following benefits:

- Understanding of the concepts and fundamentals of chemical & process engineering.
- Review of conservation of material and energy.
- Explore effective and efficient material and energy transfer.
- Explore process design fundamentals.
- Apply the chemical & process engineering principles and fundamentals to solve problems over a wide range of industrial applications and processes.

As an engineer, scientist or manager working in the chemical process industry, this Workshop will help enhance your productivity and value at your work place. This Workshop will provide you with a good understanding of the chemical & process engineering concepts and basic design of process equipment that will help you interact more effectively and efficiently with your engineers and process & production units.

A set of training materials will be provided that will serve as a valuable reference for you back on your job. The training materials include solved problems that can be directly applied to your applications, lists of references and tables of data.

Upon completion of this 2-day Workshop, you will understand and know how to:

- Apply the fundamentals of chemical & process engineering in understanding and enhancing the production systems at your company.
- Solve practical problems in material and energy balances related to the production equipment at your factory.
- Evaluate chemical process unit operations and equipment, such as reactors, heat exchangers, and mass transfer equipment.
- Work effectively and efficiently with process engineers and other technical personnel in your organization.

2. COURSE SCHEDULE & OUTLINE (2 DAYS)

DAY I: 26 NOVEMBER 2025 (WEDNESDAY)

Time	Programme
8.30am – 9:00am	Registration
9.00am – 10:30am	(1) Chemical & Process Engineering and Chemical & Process Engineers: An Introduction. (2) The Conservation of Materials (Mass) (with examples in waste reduction and sustainability).
10.30am – 10:45am	Morning Tea Break.
10.45am – 12:30pm	(3) The Conservation of Energy (with examples in energy optimization and sustainability).
12.30pm – 1:30pm	Lunch
1.30pm – 3:30pm	(4) The Flow of Liquids (with examples in liquid pumping energy losses and pump efficiency).
3.30pm – 3:45pm	Afternoon Tea Break.
3.45pm – 6:00pm	(5) Process Engineering: Gases (with examples in gas compression system design and optimization).
6.00pm	End of Day 1.

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.

DAY 2: 27 NOVEMBER 2025 (THURSDAY)

Time	Programme
9.00am – 10:30am	(6) Chemical Reactions & Reactive Processes (with examples in inherently safer design for chemical reactions and reactors).
10.30am – 10:45am	Morning Tea Break.
10.45am – 12:30pm	(7) Heat Transfer Theory and Heat Transfer Equipment (with examples in process design and optimization of shell & tube heat exchanger).
12.30pm – 1:30pm	Lunch
1.30pm – 3:30pm	(8) Mass Transfer (with examples in design and optimization of heat transfer systems, such as molecular sieve adsorption tower, distillation, etc.).
3.30pm – 3:45pm	Afternoon Tea Break
3.45pm – 6:00pm	(9) Process Control, Process Flow Diagram (PFD), and P&ID development. Case Study: Developing A Process Simulation with open-source process simulation software.
6.00pm	End of Day 2

BIODATA OF SPEAKER

Ir. Dr. Eow John Son is a Professional Engineer (BEM) and Chartered Engineer (UK) and, with more than 18 years' experience in the Oil & Gas industry, having worked with offshore sand separation and management, produced water treatment, crude oil dehydration-desalting, seawater treatment & injection, and gas processing technologies and equipment. He is also an Industry Advisor for Universiti Teknologi Malaysia (UTM).

John obtained his Diploma in Chemical Engineering from UTM in 1996, and his B.Eng in Chemical Engineering (1st Class Hons) and PhD in 1998 and 2002, respectively, from the University of Surrey, UK. His PhD work was on electrostatic oil dehydration & desalting technology. Over the years, he has worked as a process engineer & technology specialist with oil & gas technology companies, such as Global Process Systems (Malaysia), Keppel Offshore and Marine (Singapore), Cameron Process Systems (Singapore, Japan and Malaysia), EDES Technology Malaysia, SUEZ Oil & Gas Solutions, FORUM Energy Technologies (F-E-T).

His experiences cover a wide range from Technical and Commercial Proposal to Detailed Process Engineering to Commissioning to Production Improvement & Troubleshooting for oil & gas processes and technologies. He has also conducted technical training and process engineering improvement work for Saudi ARAMCO, SABIC, PETRONAS, Sarawak SHELL, CNOOC, Murphy Oil Sarawak, Husky Oil Energy, GAIL India, Transwater API, CPOC, Boustead-Salcon Water Solutions, etc. John is also an experienced HAZOP and LOPA SIL facilitator for oil & gas, and chemical and process engineering projects.

REGISTRATION FORM
PHYSICAL 2 DAYS SEMINAR ON
PROCESS ENGINEERING FOR OTHER ENGINEERS, SCIENTISTS & MANAGERS
26 & 27 NOVEMBER 2025 (WEDNESDAY & THURSDAY) CLOSING DATE: 15 NOVEMBER 2025
Email : ezzaty@iem.org.my

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NAME	I/C No	MEMBERSHIP NO. / GRADE	FEES (RM)
Sub Total:			
SST Added 8% :			
Total Amount Payable :			

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