



IEM

The Institution of Engineers, Malaysia

**Training Mode:
Physical**



Approved Duration:
09/11/24 - 10/11/25

HRD Corp Serial No:
10001485161

Physical One Day Course on “Issues and Challenges on the Design & Operation of ACMU System for Healthcare Facilities”

BEM APPROVED CPD: 6

REF NO: IEM24/HQ/525/C

~~06-February-2024 (Thursday)~~ Rescheduled to

Date : 28 February 2024 (Friday)

Time : 9.00 am - 05.30 pm

Venue : Auditorium Malakoff, Wisma IEM

Speakers : Ir. Al-Khairi Mohd Daud

CLOSING DATE : 24 Feb 2025

REGISTRATION FEE'S (subject to 8% SST)

	ONLINE (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, bank-in, Quotation & Invoice)
IEM Student Members	180.00	230.00
IEM Graduate Members	300.00	350.00
IEM Corporate Members	450.00	500.00
Non-IEM Members (Non of the Above)	900.00	950.00

**Jointly Organised Building Services Technical Division (BSTD) &
Environmental Engineering Technical Division (ENETD), IEM**

Course Synopsis

The course is aimed to educate ACMV engineers on the requirement of healthcare air conditioning and mechanical ventilation systems so that the engineers are able to appreciate the importance of ventilation system for healthcare facilities specifically in Malaysia. The course will highlight the standard requirements for healthcare facilities and elaborate on the issues faced by the healthcare occupants and the challenges by the designers to meet the health care requirements and to maintain the ACMV systems.

The speaker shall share his experience in the case studies.

Target participants

This course is aimed at engineers and technicians that design, operate and maintain ACMV systems especially for medium and large hospitals.

The infection control professionals may also benefit by understanding the air conditioning system and the impact to patient care.

By the end of the course the participants will be able to:

- Understand the key applications for ventilation and air conditioning system in healthcare premises and explain why the need exists
- Identify essential components of an air-conditioning system typically used in healthcare premises
- Describe health and safety issues relating to air quality, including legal requirements relating to those issues and means of compliance
- Describe how ventilation systems can be used to minimise health associated infections
- Learn the lessons from the errors in the design and follow the strategic approach in designing the ACMV system



TRAINERS PROFILE

Trainer : Ir. Al-Khairi Mohd Daud



Ir. Al-Khairi Mohd Daud from Faqeh Management has more than 30 years in engineering fields. Ir. Al-Khairi is passionate in understanding energy and practicing energy management. As such he has been the country expert for ASEAN Energy Management Accreditation Scheme (AEMAS) with Malaysia Green Technology and Climate Change (MGTC) that has trained certified energy managers (CEM) and accredited many organizations on Energy Management Gold Standard (EMGS) since 2010.

He is also a Registered Electrical Energy Manager (REEM) both with Energy Commission (EC) and Energy Commission of Sabah (ECoS) and a Professional Energy Manager under ASEAN Centre of Energy AEMAS program. As part of his journey on energy he explored the bioenergy where he practices Reiki, Aikido and Chiqong. Along the way he was introduced to Neurolinguistic Programming (NLP) to become the practitioner of NLP and the LAB profiles. He is currently the chairman for IEM Building Services Technical Division.

Moderator : Ir. Gary Lim Eng Hwa



Ir. Gary Lim Eng Hwa has a Bachelor of Engineering (Mech) from the University of Canterbury in 1978. He started working in the manufacturing environment and had over 20 years working experiences in various capacities as Industrial Engineer/Work Study Engineer, Project Engineer, Maintenance Engineer and Factory Management.

He then joined the Insurance industry as a Risk Engineer trained to conduct Fire Risk Assessment in all types of manufacturing industries.

Currently he is a committee member with Building Services Technical Division (BSTD) and Secretary/ Treasurer of Safety in Engineering Special Interest Group (SESIG). In 2016, he attended a certification course and awarded as the Approved ISO31000 Lead Trainer from the Global Institute for Risk Management standards G31000.

Course Program

TIME	PROGRAMME
08:30 am – 09:00 am	Registration of Participants, Welcome Breakfast at D’Place, Ground Floor, Wisma IEM
09:00 am – 09:10 am	Welcoming Speech by BSTD Representative
09:10 am – 10:40 am	Overview of ACMV system requirements in healthcare facilities <ul style="list-style-type: none"> • Reasons for ventilation • Statutory requirements • Codes of practice and other guidance MSQH, HTM • Design and validation process • Ventilation – terms in use Local exhaust ventilation
10.40 am - 11.00 am	Morning Coffee Break
11.00 am - 12.30 pm	General Mechanical for Ventilation System: Requirements <ul style="list-style-type: none"> • Natural ventilation • Extract ventilation systems • Supply-only ventilation • Supply and extract ventilation • Comfort cooling • Air-conditioning • Specialized ventilation • Local exhaust ventilation • Ventilation for general areas • Mechanical ventilation systems
12.30 pm - 2.00 pm	Lunch
2.00 pm - 3.30 pm	Mechanical Ventilation System: Specialized Requirements – Operation Theatres and Isolation Rooms <ul style="list-style-type: none"> • General information • Operating department ventilation systems • Ultra-clean ventilation systems • Extract systems • Plantroom ventilation
3.30 pm - 3.45 pm	Evening Tea Break
3.45 pm - 5.15 pm	Issues and challenges – Case studies <ul style="list-style-type: none"> • Condensation in OT • Uncontrolled humidity in sterile store
5.15 pm - 5.30 pm	Q&A Session Closing Remarks by BSTD Representative

REGISTRATION FORM

Physical One Day Course on “Issues and Challenges on the design and operation of ACMV System for Healthcare Facilities”

28 Feb 2025 (Friday) Closing Date : 24 Feb 2025

Email : shahrul@iem.org.my / syafiq@iem.org.my

REGISTRATION FEE'S (subject to 8% SST)		
	ONLINE (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, bank-in, Quotation & Invoice)
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NAME	MEMBERSHIP NO. / GRADE	FEES (RM)
Sub Total:		
SST Added 8% :		
Total Amount Payable :		

PAYMENT DETAILS :

☐ Cash RM_____

☐ Cheque no._____for the amount of RM_____(non-refundable) .

FULL PAYMENT must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received 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.)

_____ (H) _____ (HP)

Email : _____

Signature & Stamp

Date