

REGISTRATION FORM
**2-Day Course on 'HVAC Design: Cooling Capacity
 Calculation & Psychrometrics'**

**29 & 30 April 2019 and
 02 & 03 September 2019**

No	Name(s)	M'ship No.	Grade	Fee (RM)*
SUB TOTAL				
TOTAL PAYABLE				
<i>*Course fee is inclusive of 6% SST and HRDF Claimable.</i>				

Enclosed herewith a crossed cheque No: _____ for the sum of RM _____ issued in favour of "**IEM Training Centre Sdn Bhd**" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the **cancellation term**. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

Contact Person: _____ Designation: _____

Name of Organization: _____

Address: _____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

Signature & Stamp

Date

Photocopies are acceptable

REGISTRATION FORM
**2-Day Course on 'HVAC Design: Cooling Capacity
 Calculation & Psychrometrics'**

Organised by:

IEM Training Centre Sdn Bhd

Please Tick	Date	Venue
	29 & 30 April 2019	Wisma IEM,
	02 & 03 September 2019	Petaling Jaya

Grade	Offline Rate	*Online Rate
IEM Members	RM1,060.00	RM1,007.00
Non-IEM Member	RM1,590.00	RM1,537.00
*Online Rate - Please register at our website www.iemtc.com.		
BEM Approved CPD Hours = TBA / Ref. No: TBA		

TERMS & CONDITIONS:

- Payment via **CASH / CHEQUE / BANK-IN TRANSMISSION**.
- Fee paid is not refundable. Registration fee includes lectures notes, refreshment.
- All registration fees must be **FULLY** paid before commencement of the course. Government agencies and Statutory Bodies are required to provide Local Orders. IEM Training Centre Sdn. Bhd. reserves the right to refuse entry for participant(s) who have not paid their registration fees to attend the course. **THIS REQUIREMENT WILL BE STRICTLY ENFORCED.** *Please be informed that the course will only be carried out if there is sufficient number of participants. The confirmation or cancellation email will be sent to the registered email address one or two weeks before the event dates.

PAYMENT METHOD

- Local Cheque / Banker's cheque made payable to "**IEM TRAINING CENTRE BHD**".
- Directly bank in or online transfer to :- (Please forward soft copy of payment ac
IEM TRAINING CENTRE SDN. BHD.
 Account no. 514169143176
 Malayan Banking Berhad

INTRODUCTION

Cooling capacity calculation is the most fundamental requirement for any air conditioning system design. The application of psychrometric principles is often regarded as an area of mystery to many air conditioning engineers. However, it is the key for solving many air conditioning problems such as condensations, humidity problems, non-performance at part-load operations etc

OBJECTIVES

The objective of this course is to enable participants to calculate the cooling capacity required for a particular air conditioning system. Furthermore, the participants will understand the practical applications of psychrometric in air conditioning, design for humidity controlled systems and problem solving using psychrometric chart.

TOPICS

A. HEAT LOAD CALCULATION

- An overview: heat loads and cooling capacities, temperature as a state of equilibrium
- Methods of cooling load estimation
- Heat load calculation using E20 method
- Some short-cut methods
- Some pitfalls: under-sizing, over sizing

B. FUNDAMENTAL PSYCHROMETRICS

- A study of the properties of the moist air
- Dry bulb and wet bulb temperatures
- Humidity: Relative humidity and moisture contents
- Dew point temperature

C. UNDERSTANDING PSYCHROMETRIC CHARTS

- Properties of moist air
- Temperatures, humidity, enthalpy, density

D. FUNDAMENTAL THERMODYNAMIC PROCESSES

- Cooling, heating, humidification, dehumidification
- Understand condensation

E. PSYCHROMETRIC CALCULATIONS

- Concept of bypass factor
- Effective sensible and latent loads
- Sensible heat factor
- Mixing of air
- Concept of apparatus dew point temperature
- Calculation of air flow quantities
- Calculation of on-coil and off-coil temperatures

F. HUMIDITY CONTROL

- Types of dehumidification methods : chemical & refrigeration
- Advantages and disadvantages of both methods
- Reheating
- Moisture control at source
- Energy consumption analysis and conversation

PROFILE OF COURSE FACILITATOR



Ir. Chua Keng Seng, B.E.(Hons), MIEM, P.Eng., MASHRAE, MIMM, CCP, graduated from the University of Malaya in 1974. Qualified as a Professional Engineer, he worked with Carrier Malaysia Sdn. Bhd., first as the Service Manager and then as Engineering Manager for about 10 years. During the next 25 years, he operated his own companies in contracting, maintenance and also in consultancy business. He has wide experience in the design, installation, trouble shooting on various types of systems and also in project management. He was in the design and project management team which implemented the Putrajaya Precinct 2 District Cooling Plant which has a capacity of 30,000 cooling tons.

Ir. Chua has also been involved in many training programmes. He lectured air conditioning design in the Mechanical Faculty of University Malaya between 1978 to 1984 and in Monash University for the last 3 years. Besides he had been invited to deliver lectures and presentations in the University Technology Malaysia, University Technology Petronas, The Institution of Engineers, Malaysia and conducted in-house training for some Corporate Companies.