



**APPLIED TECHNOLOGY
GROUP OF COMPANIES**
Australia • New Zealand • Hong Kong • Malaysia • Singapore

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Course On

Air Conditioning & Refrigeration Systems

Date : 8th December 2016 (Thursday)
Time : 9.00 am to 5.00 pm
Venue : Armada Hotel, Petaling Jaya

COURSE OVERVIEW

The 1-Day intensive course focuses on :

- The theoretical and practical aspects of air conditioning and refrigeration system.

The course highlights :

- Principles of Operation of air conditioning and refrigeration
- Basic Components of air conditioning and refrigeration
- Mollier Charts for Performance Analysis
- Pressure-Enthalpy Diagram
- Refrigeration Process Analysis
- Principle and selection of Capillary Tubes
- Thermostatic expansion valve
- Evaporator and condenser
- Compressor
- General Maintenance

Work examples & calculations are done to give a better understanding of the operation and application of liquid chillers.

LEARNING OUTCOME/ BENEFITS OF COURSE

This course will provide the participants with the followings benefits:

- Understanding the principles of operation of air conditioning and refrigeration.
- Understanding the significance of various components of air conditioning and refrigeration.
- Learning how to apply the Mollier chart to analyse the performance of air conditioning.
- Understanding the various performance characteristics of **Capillary Tubes**.
- Understanding the performance characteristics of thermostatic expansion valves.
- Understanding the principle of evaporator and condenser.
- Understanding the principle of compressor.
- Knowing the importance of maintenance of air conditioning and refrigeration.

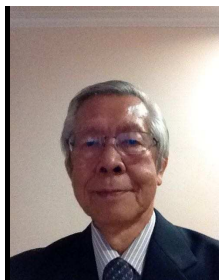
Special Discount

Early Bird Discount RM50

Register for course and pay before 8th November 2016

Air Conditioning & Refrigeration Systems

SPEAKER PROFILE



Dr. Ling Foon Fatt

Dr. Ling Foon Fatt has extensive experience in Education, R & D, Training, Consultancy and Manufacturing, having held various posts and positions with the following organizations:

1. Associate Professor, Mechanical Engineering Department, University of Malaya (1981 - 1994).
2. Technical Advisor, OYL Industries Bhd.(1987-1994)
3. Chief Executive Officer, TOPAIRE Sdn. Bhd.(1994-1996)
4. Senior Group General Manager, Top Group Holdings Bhd.
5. Director of a Consulting Engineering Firm.
6. Engineering & Training Advisor, UMJ Air-Conditioning Sdn. Bhd.
7. Member of International Editorial Advisory Board, Journal of Energy, Heat and Mass Transfer.(1988-1994)

Dr. Ling has been the Principal Interviewer for the Examination of Corporate Membership of the Institution of Engineers, Malaysia (1976 - 1983); Chairman, Sub-Committee in Qualification Assessment, The Institution of Engineers, Malaysia (1981- 1983); and The Council Member of the Institution of Engineers, Malaysia (1981/82 - 1983/84).

He was a member of the Steering Committee on Training and Entrepreneur Development, Federation of Malaysia Manufacturers (1992 - 1996).

Dr. Ling has supervised more than 80 engineering thesis projects, and published over 50 technical papers in International and regional journals.

Dr. Ling has conducted over 300 public courses and has written 20 work books.

Over 3000 engineers, managers, executives, supervisors and technicians have successfully attended the public courses conducted by Dr Ling. The participants are from various industries of Manufacturing, Services, Education, Oil & Gas, Construction and Commerce.

Dr. Ling has conducted in-house training for over 30 companies and organizations.

WHO SHOULD ATTEND

This course is designed for:

- Maintenance Engineers/Managers/Executives
- Consulting Engineers
- Service Engineers
- M&E Contractors
- Building/Complex Owners
- Chargemen & Technical Executives
- Technicians who deal with Air Conditioning & Refrigeration Systems and
- New Engineers

*Claimable under HRDF SBL scheme subject to max limit allowed.
BEM CPD-Hours (Application in progress), CIDB CCD-Points (Application in progress)
Suruhanjaya Tenaga Register Electrical Energy Manager (REEM) CPD: (Application in progress)*

Air Conditioning & Refrigeration Systems

COURSE SCHEDULE

DAY 1

9.00am - 10.30am	<p>Session 1: Principles (Mollier Chart)</p> <ul style="list-style-type: none"> • Refrigeration Cycle • Saturation Condition • Superheated Vapour • Subcooled Liquid • Saturated Vapour Tables • Vapour Compression Refrigeration System • Pressure-Enthalpy Diagram • Refrigeration Process Analysis • Work Examples
10.30am - 10.45am	<i>MORNING TEA BREAK</i>
10.45am - 11.45am	<p>Session 2: Capillary Tubes</p> <ul style="list-style-type: none"> • Operation • Applications • Capacities • Liquid Length, Bubble Point & Two-Phase Length • Limitation • Starvation & Overfeeding • Selection <p>Session 3: Thermostatic Expansion Valves</p> <ul style="list-style-type: none"> • Basic Construction • Operation • Application • Degree of Superheat • Equalizers • Location of Remote Bulb • Adjustment of Superheating Setting • Field Service
11.45pm - 12.30pm	<p>Session 4: Evaporators</p> <ul style="list-style-type: none"> • Types of Evaporators • Types of Construction • Finned Coils • Evaporating Circuits • Pressure Drops • Vapour Velocity • DX Coils & Chilled-Water-Coils <p>Session 5: Condensers</p> <ul style="list-style-type: none"> • Types of Condensers • Operation Principles • Applications • Air-Cooled Condensers • Water-Cooled Condensers • Flow-Rate Calculation • Heat Rejection • Non-Condensing Gases
12.30pm - 2.00pm	<i>LUNCH</i>

Air Conditioning & Refrigeration Systems

COURSE SCHEDULE

2.00pm - 3.30pm	Session 6: Compressors <ul style="list-style-type: none">• Types of Compressors• Operation Principles• Reciprocating Compressors• Rotary Vanes Compressors• Screw Compressors• Centrifugal Compressors• Application
3.30pm - 3.45pm	<i>TEA BREAK</i>
3.45pm - 4.30pm	Session 7: Maintenance <ul style="list-style-type: none">• Preventive Maintenance• Cleaning Air-Cooled Condensers• Maintenance of Water-Cooled Condensers• Maintenance of Evaporators• Maintenance of TEV• Refrigerant Leaks• Compressors Failure & Damage• Noncondensable Gases• Liquid Slugging Problems
4.30pm - 5.00pm	Session 8: <ul style="list-style-type: none">• Reviews• Question and Answer• Conclusion
<i>END OF DAY ONE</i>	

COURSE REGISTRATION FORM

Course title:
**Air Conditioning &
 Refrigeration Systems**

(✓ Please tick)

8th December, 2016 (Thursday)
 Petaling Jaya, *Armada Hotel*

Company Information

Company:	
Address:	
State/ Province:	
Zip/Postal Code:	
Country:	
Contact Person:	
Email:	
Phone:	

Attendee Information

Name (1)	
Job title:	
E-mail:	
Mobile/Tel No:	
Name (2)	
Job title:	
E-mail:	
Mobile/Tel No:	
Name (3)	
Job title:	
E-mail:	
Mobile/Tel No:	

Registration Fee

	Fee Before GST (6%)	GST (6%)	TOTAL
Individual Fee	RM945	RM56.70	RM1,001.70
Group Fee (3 or more delegates)	RM895	RM53.70	RM948.70

Closing date: 1st December 2016. An early bird discount of RM50 for payment received before 8th November 2016.

Payment

Payment is to make payable to:
Applied Technology Group Sdn Bhd
Public Bank Berhad (Malaysia)
 Account no: 3178247302
 GST Registration Number: 000641294336

Payment terms:

Payment is required before the event. Once payment is received, your seat will be reserved. Registration fee includes lunch, refreshments and full training documentation as specified. Delegates may be refused admission if payment is not received prior to the event. The fee does not include hotel accommodation.

Cancellation Policy

All cancellation of registration must be made in writing. If you are unable to attend:

- A substitute delegate is welcomed at no additional charge.
- Your registration can be credited to a future event.
- You will receive a full refund less 10% administration charge if cancellation is received in writing more than 14 days before the event.
- No cancellations will be accepted within 14 days before the event start date. Full course documentation will however be sent to the delegate.

Course Schedule

Course starts at 9.00am and ends at 5.00pm daily. Please arrive at 8.30am on day one to allow time to register and receive course materials.

Please send completed form to:

Fax to: **+603 5637 9945**
 or Email to : admin@apptechgroups.net
 For enquiry, please call: +603 5634 7905
 Or refer to our website www.apptechgroups.net

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