

## FUNDAMENTALS OF REFRIGERATION

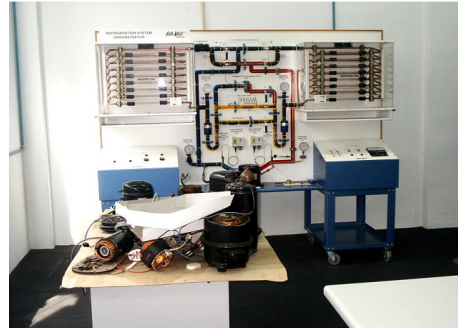
### COURSE OVERVIEW

The most important application of a modern refrigeration system is the refrigerator used for the preservation of food. Other refrigeration systems are used for air-conditioning, freezing food and so on.

The Refrigeration System Training is designed as an integrated training system with hands-on student experimentation covering various fundamental principles and component of typical refrigeration system and heat pumps. The Training Demonstrator is designed to clearly show the different refrigerant stages within the cycles of the most common refrigeration system configuration.

### WHO SHOULD ATTEND

1. Operators/ Technicians in Refrigeration & Air-Cond. field.
2. Technicians, Supervisors, Chargemen, Engineers who wish to enhance their knowledge in the air-conditioning & Refrigeration.



### TRAINER

PESDC has a panel of professionally qualified, well-trained and industrially experienced technical trainers.

### COURSE FEE

**RM950.00 per pax**  
(Inclusive of course materials, lunch and refreshment).

*Certificate of Achievement will be awarded upon successful completion of the course.*

**SBL  
claimable**

### COURSE OUTLINE (STECH-R01)

- Physics Applied to Refrigeration / Introduction to Refrigeration
- The Compressor / The Evaporator and Condenser
- Metering Devices / System Control Devices
- Introduction to Heat Pump Systems / Refrigeration Faults

#### DAY 1

1. Heat and Heat Transfer
2. Matter, Molecules and Energy
3. Pressure and Temperatures
4. The Basic Refrigeration System
5. Additional Refrigeration Devices

#### DAY 2

1. Operation of a Compressor
2. Types of Compressors
3. The Evaporator
4. The Condenser
5. Types of Condenser

#### DAY 3

1. Capillary Tube Control
2. Thermostatic Expansion Valve Control
3. Low Pressure Controllers

#### DAY 4

1. High Pressure Controllers
2. The Basic Heat Pump System
3. Reversing Refrigerant Flow

#### DAY 5

1. Heat Pump Control
2. Electrical Faults
3. Compressor & Pressure Controller Faults

### COURSE DETAILS

**Duration : 5 Days (40 hours)**

**Date :**

**Time : 9.00am to 5.00pm**

**Venue : PESDC Training Complex**

*For Further Enquiries, please contact:*

**Mr Thillai or Mr Jeremy Lai**

PESDC Training Complex

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