

# AIR-CONDITIONING AND MECHANICAL VENTILATION

COMFORI SDN BHD

## Objectives:

- Receive a thorough grounding in basic knowledge regarding air conditioning and mechanical ventilation.
- Gain a solid understanding of the issues associated with the proper sizing, selection, installation of air conditioning & mechanical ventilation system.
- Understand the characteristics of various types of ACMV systems.
- Learn the ways to determine design cooling and heating loads.
- Learn to evaluate potential energy saving techniques and equipment.
- Know how to determine the possible air conditioning and mechanical ventilation systems approaches that best serve your application.
- Discover potential solutions to troubleshoot typical problems with air conditioning and mechanical ventilation.
- Study the effective methods used in reducing the energy running costs of air conditioning systems through housekeeping and system recommissioning.

## Overview:

The purpose of this course is to familiarize workshop participants with knowledge on working principle of air conditioning and mechanical ventilation systems, understand the functions of major components in air conditioning and understand the types of air conditioning and how to do troubleshooting. The workshop approach is a combination of formal presentation, interactive discussion, and case studies. This workshop also demonstrate a well-proven approach used in reducing the energy running costs of air conditioning and mechanical ventilation system through housekeeping and system recommissioning.

- Learn about the techniques of optimizing air conditioning system operation.
- Adopt the strategies towards the appropriate maintenance and the correct use of air conditioning and mechanical ventilation system.

## Modules:

Module 1: Overview of Air-Conditioning

Module 2: Air-Conditioning Components

Module 3: Psychometric Chart

Module 4: Load Estimation

Module 5: Air Delivery System

Module 6: Piping System

Module 7: Types of Air-Conditioning System

Module 8: Types of Equipment Involved

Module 9: Commissioning

Module 10: Introduction of Ventilation

Module 11: Types of Mechanical Ventilation

Module 12: Pressurisation and Smoke Spill

Module 13: M&E Plant Room and Toilet Ventilation

Module 14: Basement Car Park Ventilation