KNOWLEDGE
For Training

1. Course Details:

Course Code : EPET-005
Course Title : Operation and Maintenance of Central Air Conditioning
Course Duration : 5 Days

2. Course Overview:

- This course will provide the participants with the knowledge on how to design and retrofit existing air-conditioning systems to improve energy efficiency while maintaining thermal comfort.

3. Learning Outcomes:

- Enhance the participants' understanding on the various optimization strategies.
- Participants will also learn how to analyses and measure the energy savings from different efficient systems
- Develop the maintenance tasks from the available manuals
- Understand the operation modes

4. Course Contents:

- Fundamental of Air Conditioning
  - ✓ Basic Vapour Compression Cycle
  - ✓ Cooling Load Tabulation
  - ✓ Principles of Psychometric Properties in Air-Conditioning
- Central Chilled Water System
  - ✓ Design and configurations of Chillers and Central Chiller Water Plants
  - ✓ Types and configurations of Chilled and Condenser Water Pumps
  - ✓ Types and configurations of Cooling Towers
- Chilled Water Air-Side Systems
  - ✓ Types and design of Air-Side Systems
  - ✓ Types and configuration of AHUs, FUCs and VAV
- Water & Air Distribution Systems
  - ✓ Piping and Ducting Design
- Optimization and control of chiller plants
  - ✓ Chilled Water System Measurement and Verification
  - ✓ Chiller, Cooling Tower, Chilled and Condenser Water Pumps Optimization
  - ✓ Control strategies for Chiller Plant
- Optimization and control of airside systems
  - ✓ Deployment of VAV

- ✓ CO2 Demand and Ventilation
- Chiller plant maintenance
  - ✓ Energy reduction through good operation and maintenance

5. Our Methodology:

- Make coaching and monitoring innovative and using modern
- Media training also using on the go training by using interactive means and focusing on
- The exercises, practical applications and real situations study.
- Live delivery method, instructor-led training.
- Experienced consultant, trainers, and professional.
- Qualified trainer with high-level experience

6. Attendance Reports:

- Send daily attendance reports to trainingdep
- Send full attendance report to training dep. by the end of thecourse
- Attend 100 % from the course days also providedaily
- Issue attendance certificate for participant who attend minimum 80% from the course duration

7. Pre/Post Reports:

- Pre- assessment before starting training.
- Post assessment after finish training
- Full report for the deferent between Pre-& Post assessment

8. Who Should Attend?

- Engineers
- Project Managers
- Energy Managers
- Facility Managers
- Technicians