

# CERTIFICATION COURSE LEVEL 1& 2

## CURRICULUM

### LEVEL 1:-

- 1 Basics of Air conditioning systems
- 2 Refrigeration Equipment and Systems
- 3 Requirements of AC systems for proper functioning
- 4 Basics on Tools, Refrigerants, handling of various types of gases, Ozone depletion, disposal of gases
- 5 Procedure of pressure testing, vaccumizing and commissioning
- 6 Fundamentals of Ellectricals in HVAC systems
- 7 Controls, measuring and testing instruments
- 8 Operation and routine maintenance
- 9 Health, safety requirements & good house keeping
- 10 Preventive maintenance:
  - a. Window AC, Split, Ducted & PACs
  - b. Central Plants
11. Trouble shooting:
  - a. Split, Ducted unite and PACs
  - b. Central plants

### LEVEL 2 :-

1. Basics of Air conditioning system
2. Refrigeration Equipment and system
3. Psychrometrics
4. Projects Management:
  - a. Central plants- Air cooled & water cooled
  - b. Chilled water system.
  - c. Pumping system
  - d. Air distribution system
5. Statutory requirements, Labour laws, Health and Safety requirements
6. Refrigerants, handling of gases, Ozone depletion & gas disposal
7. Pressure testing, vaccumizing and commissioning central plants
8. Tools, measuring and testing instruments.Fundamentals of Electricals, controls& their functions
9. Operation & maintenance of nVFD in HVAC system
10. Operation & Preventive maintenance of
  - a. Split units and PACs
  - b. Central plants
  - c. VRF
  - d. Centrfugal plants
  - e. Screw chillers
11. Performance Evauation:
  - a. Air management.
  - b. Water management
  - c. Electricals
12. Trouble shooting:
  - a. Split units & PACS
  - b. Central plants