



Course Objectives :

Hvac Systems Design course aims to teach engineers to design different cooling and ventilation systems for all types of building (residential , administration , industrial). The course covers all Chilled water piping sizing and pumps types and everything related to Hvac design. During the course we will teach you how to search the International codes to get the correct design of the system. You will be a designer by the end of this course.

Outline:-

(Introduction)

project Staff
project steps
types of air conditioners.
Read Architectural Drawing.
project data collection

(Hap software)

Introduction to HAP Software
Ashrae code
Load Estimation
Weather
Manual calculation
Spaces
Systems (Report – Check report)

(Air Conditioning)

Air Conditioning Systems
Introduction (D.X. Systems – Chiller Systems)
X. Systems (Decorative – Ducted)
Unite selection (Decorative – Ducted)
Read Catalog

(Air Distribution)

Air Distribution Applications
Air Outlets Selection (From Catalog) Water Velocity

(Air Systems)

Duct systems Design (Mcquay Software)
Rectangular Duct Design
Round Duct Design
Static presser Calculation
Duct insulation
Fan System Interface

(Chiller systems)

Introduction to Chiller Systems
Pump Selection
Chiller Systems type
Cooling tower
Fan coil selection
Air handling unit
Chilled water pipe
pipe sizing
Expansion tank

Notes:-

- Courses are documented from the international codes & Standards.
- Presentations are provided with illustrative videos & pictures.
- Soft copy of codes catalogues project samples & other useful materials will be provided.