## HVAC (PART1) with HAP|Excel|AutoCAD|Manual Calculations

Heat ventilation and air conditioning (HVAC) is one of the most important systems for any building design.

HEAT VENTILATION \& AIR CONDITIONING Design course that you need in order to get your hand on the HVAC design as this course collects most of the knowledge that you'll need in your journey.

## You will learn:

- Discuss some thermodynamic for heating and ventilation fundamentals that will be the basics of that course
- Analyze the psychometric chart and learn how to use it
- Design the thermal loads for any project with the manual calculations
- Learn how to enter the standard handbooks like ASHRAE
- Use the Excel software to design the thermal load calculations automatically
- Apply with a practical project to calculate its total thermal loads with Excel
- Learn all the required details about the HAP software to implement your HVAC project automatically
- Design the air terminals system required for your HVAC project
- Design the Ducts system required for you HVAC project
- Learn about the direct expansion HVAC system and its different types
- Learn about the chiller HVAC systems and its different types
- Design the chiller system required pumping and piping systems
- Learn about the chiller system required controlling systems and valves.


## This course for

- Mechanical engineers
- Mechanical engineering students
- HVAC designers
- Fluid mechanics students
- Heat Ventilation and Air Conditioning students
- Anyone who need to construct his HVAC project
- Energy engineers


## Course Duration

5 Days

