

Objectives:

- Why HVAC systems play a major role in achieving quality indoor environment.
- Basic air-conditioning.
- The impact of HVAC systems on comfort, productivity and indoor air quality.
- Heat loss and cooling load calculations.
- HVAC equipment and how it operates.

Overview:

This practical course will develop your knowledge of basic principles and provide you with a through understanding of heating, ventilation and air-conditioning systems. Your participation in this course will help you understand HVAC system requirements, which can be quite diverse. You'll learn how properly designed HVAC systems can efficiently and cost-effectively provide a comfortable and healthy indoor environment. You'll also discover how poorly designed or performing HVAC systems can adversely impact occupant comfort, productivity and health.

Modules:

Module 1: Introduction to HVAC

Module 2: HVAC

Module 3: Psychometrics

Module 4: Psychometrics Workshop

Module 5: Fundamentals of Heating Load Calculations

Module 6: Fundamentals of Cooling Load Calculations

Module 7: Introduction to HVAC Controls

Module 8: HVAC Systems Workshop

Module 9: Introduction to Refrigeration Equipment

Module 10: Overview of Air-Conditioning Systems

Module 11: Air Delivery Systems

Module 12: Air-Conditioning System

Module 13: Achieving Successful HVAC Systems

Module 14: Alternative Technologies (Gas Cooling)