

**Course Details** 

# **Application and Design**

#### Introduction

To comply with current legislation for refrigeration with lower environmental damage, greater care is needed in system design and component selection. The Application and Design course is aimed at engineers/sales personnel in the refrigeration industry, to improve and update equipment selection and system design techniques and to improve efficiency, reliability and cost effectiveness of refrigeration plant.

#### **Objective**

To attain an understanding of the principles of refrigeration, heat load calculations, equipment and system design. Special attention will be paid to design for minimum environmental damage.

### Methodology

The presentation will be assisted by the use of good quality visual aids and by worked examples. Practical work on real systems will be carried out where appropriate.

## Synopsis

- Refrigeration theory
- Heat load calculations
- Safety
- Components
- Common refrigerants
- Environmental issues
- Basic electrics
- System control
- PH charts
- Refrigerants for special applications
- Component selection
- Pipe design
- System design for energy efficiency
- Why compressors fail

