



## THE REFRIGERATION CYCLE - COURSE OUTLINE -

### OVERVIEW:

This course is designed to provide an introduction to refrigeration theory and is a prerequisite for the "Control Theory Module 1" course. Course attendees will better understand the concepts involved in the refrigeration cycle and how the process works. They will learn about the equipment used, its role within the cycle and be able to identify system components. On completion of the course attendees are equipped to discuss the refrigeration cycle with fellow workers and explain system operation. This course provides a good foundation from which to learn about control theory as applied to the refrigeration cycle.

### AGENDA:

- Air conditioners - How do they work?
- What is Refrigerant
- Parts of an Air conditioner
  - The Compressor
  - The Condenser
  - The Evaporator
- Reverse Cycle AC Units - Reversing Valve
- Refrigerant Leakage Detection
- Thermal Convection Process
- Temperature Control

### WHAT'S NEXT:

The knowledge gained in this course is built on in the "Control Theory Module 1" course that explains how to control the refrigeration cycle to provide temperature control.

