

# Apprenticeship Training Programme

## Phase 1: *With Employer*

Induction Training  
Introduction to Health & Safety Training  
Introduction to Tools & Equipment  
Introduction to Basic Skills

## Phase 2: *Delivered in Training Centre (20 weeks)*

### Course Content:

Induction  
Basic Refrigeration/Air Conditioning  
Basic Refrigeration Systems  
Refrigeration/Electrical Installations  
Compressor Rebuild  
Electromechanical Equipment Servicing  
Control Panel Design & Wiring  
Low Temperature Room Installation  
Related Theory

## Phase 3: *With Employer*

Work Based Assessments

## Phase 4: *Delivered in Educational Colleges (10 weeks)*

### Course Content:

Commercial/Pack Systems  
Air Conditioning/Heat Pump Systems  
Electrical Science Review  
Electrical Installation Systems  
Related Theory

## Phase 5: *With Employer*

Work Based Assessments

## Phase 6: *Delivered in Educational Colleges (8 weeks)*

### Course Content:

Refrigeration PLC/Controls  
Planned Maintenance  
Industrial Systems  
Related Theory

## Phase 7: *With Employer*

Work Based Assessments

*The overall duration of this apprenticeship is a minimum of 4 years provided all phases are successfully completed. On successful completion of the programme the learner is awarded a Level 6 Advanced Certificate Craft – Refrigeration and Air Conditioning.*

For further information please contact your local Education & Training Board Training Centre or log onto [www.SOLAS.ie](http://www.SOLAS.ie)

# The Craft of Refrigeration & Air Conditioning



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 **Apprenticeship**

KNOWLEDGE. SKILL. COMPETENCE

## Overview

The refrigeration and air conditioning Craftsperson installs, maintains and repairs all types of refrigeration and air-conditioning equipment and systems, domestic, marine, commercial and industrial, including such items as household, hospital, hotel and shop refrigerators, display cabinets, deep freezers, cooling plants, cold rooms and refrigerated transport.

## Work activities

When installing new commercial and industrial equipment the craftsperson locates motors and other refrigerating components in position by reference to plans and specifications and connects the equipment to an electrical power supply.

He/she should have a sufficient knowledge of electrical work, welding and plumbing for the job and be able to dismantle plant for repair and fit new parts. Refrigeration and Air Conditioning craftspersons generally are employed by dealers and contractors engaged in selling and servicing refrigeration equipment.

## Personal qualities and Skills

As a refrigeration and air conditioning craftsperson you will need to be physically fit and able to work well with your hands, strong problem solving skills are essential and an aptitude for understanding diagrams is necessary.

## Aspects of Work

- Learning new practical skills
- Doing practical work not needing new skills
- Being physically active and on your feet
- Learning and developing new craft-related skills, knowledge and competence
- Work requiring accuracy and attention to detail
- Lifting or carrying heavy items
- Travelling around from place to place
- Understanding technical drawings and diagrams
- Working with electricity or electronics
- Practical skills and theoretical knowledge
- Taking responsibility for own learning, including the allocation of study time

## Opportunities

Opportunities arise from time-to-time for promotion to supervisor level. Many persons use an apprenticeship as a first step in proceeding to such occupations as instructors, teachers, training advisers, managers and owners of businesses.

Where apprentices and crafts persons have the necessary ability, initiative and basic qualifications, opportunities are available for advancement. These include advanced technological and management courses which are available in Institutes of Technology, schools of management, professional institutes, etc.

People anxious to advance themselves in their careers are advised to discover for themselves what opportunities are available.

## Educational Requirements

The minimum age at which the employment of an apprentice may commence is 16 years of age.

The minimum educational requirements are:

1. Grade D in five subjects in the Department of Education & Science Junior Certificate Examination or an approved equivalent,  
or
2. The successful completion of an approved Pre-Apprenticeship course  
or
3. Three years' work experience gained over sixteen years of age in a relevant designated industrial activity as SOLAS shall deem acceptable

You must obtain a job as an apprentice in your chosen occupation. Your employer must be approved to train apprentices and must register you as an apprentice within 2 weeks of recruitment.

In certain crafts, apprenticeship applicants are required to pass a colour vision test approved by SOLAS.