

Apprenticeship Training Programme

Phase 1: With Employer

Induction Training

Introduction to Health & Safety, Tools & Equipment and 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

Phase 3: With Employer

Work Based Training and Assessments

Phase 4: Delivered in Educational College (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 Training and Assessments

Phase 6: Delivered in Educational College (10 weeks)

Course Content:

Refrigeration PLC/Controls

Planned Maintenance

Industrial Systems

Related Theory

Phase 7: With Employer

Work Based Training and 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.

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For further information please contact your local Education & Training Board Training Centre or log onto www.SOLAS.ie



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The Craft of Refrigeration & Air Conditioning



 **Apprenticeship**
KNOWLEDGE | SKILLS | COMPETENCE

What is a Refrigeration and Air Conditioning craftsperson?

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.

Refrigeration and Air Conditioning craftspersons generally are employed by dealers and contractors engaged in selling and servicing refrigeration equipment.

Refrigeration and Air Conditioning craftspersons require many skills including:

- Knowledge of electrical work
- Knowledge of welding
- Knowledge of plumbing
- Inspecting and testing of systems and fault diagnosis
- Interpreting drawings and diagrams
- Performing routine maintenance and repairs

Personal Qualities and Skills

As a Refrigeration and Air Conditioning craftsperson will need to be physically active and to be able to work with your hands. An awareness of health and safety and good housekeeping is essential as well as attention to detail and an eye for the aesthetic.

The Refrigeration and Air Conditioning craftsperson must have the ability to:

- Plan and organise
- Communicate effectively
- Solve problems
- Work independently and as part of a team
- Show a positive attitude
- Recognise the need for good customer relations
- Demonstrate good work practices including time keeping, tidiness, responsibility, quality awareness and safety awareness

Aspects of work

- Learning and developing new practical craft-related skills, knowledge and competence
- Working with and learning from experienced Craftspersons
- Seeing a job through from start to finish
- Comply with Health and Safety requirements
- Working with technical drawings and diagrams
- Working with electricity or electronics
- Using tools or machinery to fabricate industrial components
- Working with a variety of specialised hand tools, power tools and equipment
- Accuracy and attention to detail
- Being well organised and careful with practical tasks
- Working at heights
- Lifting or carrying heavy items
- Being physically active
- Taking responsibility for their own learning, including the allocation of study time
- Bending and Kneeling
- Passing all your phase exams (theory, practicals skills demonstration)
- Earning as you learn

How to become an Apprentice

- You must obtain employment as an apprentice in your chosen occupation.
- The employer must be approved to train apprentices.
- The employer must register you as an apprentice within two weeks of recruitment.
- In certain crafts, apprenticeship applicants are required to pass a colour vision test approved by SOLAS.

Entry 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 & Skills 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

It should be noted that these are the current approved **minimum educational requirements** for apprenticeship programmes, however, previous experience of the following subjects would be an advantage but not essential: Mathematics, Technology, Technical Drawing/ Graphics, Physics and Metalwork.

Opportunities on Qualification

On successful completion of the apprenticeship programme, apprentices are qualified to work within the recognised trade or profession.

Where craftspersons have the necessary ability and initiative, opportunities are available for advancement. These include advanced technology courses and management courses which are available in Institutes of Technology, Schools of Management and Professional Institutes.

Many craftspersons use their qualification as a platform to launch careers such as engineers, managers, owners of businesses, teachers and instructors amongst others.