



**PRE-APPRENTICESHIP FRAMEWORK**

**FOR**

**ENGINEERING IN NORTHERN IRELAND**

**Prepared by the Engineering Training Council who represent the interests of SEMTA the Sector Skills Council for Science Engineering Manufacture and Technology in Northern Ireland**



## **OVERVIEW**

The purpose of this Pre-Apprenticeship Framework is to outline to Training Providers and to young people, who are attracted to work in the engineering sector, the basic employment and trade skills that will help make young people attractive to potential employers and strong candidates for future acceptance onto full apprenticeship programmes.

This Framework is designed to be delivered over a 52 week period and consists of three core components:

- 1) Employability Training – to improve generic workplace/employability skills
- 2) Technical Training – designed to be an introduction to the core knowledge and skills associated with the engineering sector and culminating in the achievement of one of the following recognised Technical Certificates:

City and Guilds Level 2 Certificate in Engineering (2800)

EAL Intermediate Certificate in Engineering & Technology  
(VRQ 100/2953/9)

Edexcel Level2 BTEC First Certificate in Engineering

- 3) Workplace Sampling – periods of focussed work experience with partner engineering companies.

## **ENTRY REQUIREMENTS**

There is no formal entry requirement needed to meet the requirements for the Pre-Apprenticeship Framework. As part of the normal selection procedure for apprenticeships at Level 2 & 3 appropriate aptitude tests are used, then it is strongly recommended that the same tests be utilised for those young people entering the Engineering Pre-Apprenticeship Programme. These tests assess both the individual ability to complete the programme and highlight areas where additional support may be required for learners.

## **DELIVERY PROGRAMME**

Weeks 1-12            Employability Training to include the following:

Introduction to Employment Responsibilities and Rights  
Essential/Key Skills  
Health and Safety  
Commencement of Technical Certificate  
Basic Engineering Skills  
Development of Employability Skills  
Work Placement

Weeks 13-52        Continuation of Technical Certificate/ Essential/Key Skills/Work Placement

Broad-based basic training in Electrical and/or Fabrication and/or Mechanical Engineering to include the following:

Safe use and application of a range of machine tools, hand tools and ancillary equipment necessary to carry out a range of engineering skills.

Reading and working to Engineering drawings.

Using measuring and marking out equipment.

Achieving dimensional accuracy and surface texture in an economical time.

Mechanical Engineering: Selecting and using appropriate cutting fluids and lubricants. The application of workholding techniques and correct methods

for basic production of workpieces by milling and turning. Using bench-fitting techniques to carry out simple operations.

**Fabrication Engineering:** Application of basic tools and equipment for the cutting and forming of thin plate material. The application of basic cutting and welding practices by gas and manual metal arc process.

**Electrical/Electronic Engineering:** Basic principles of electrical/electronic practices. Identifying, mounting and connecting simple electrical and electronic components.

## **DELIVERY GUIDANCE: EMPLOYABILITY TRAINING**

The following guidance is included to give delivery centres some idea of the components that should be covered during the initial 12 week employability training period.

### **Employment Responsibilities and Rights**

Some of the main laws affecting employment are:

The Employment Rights (NI) Order 1996  
The Employment Relations (NI) Order 1999  
The Employment Act (NI) Order 2002  
The Fair Employment and Treatment NI Order 1998

Basic employee rights are:

Written statement of employment  
National minimum wage  
A safe and healthy work place  
Equal pay for equal work  
Protection from discrimination on the grounds of disability, religion, political opinion, race, gender and sexual orientation and age  
Protection against unfair dismissal  
Parental leave and time off for family emergencies  
Guaranteed payments in respect of lay-off and short-time working  
Time off to fulfil trade union duties  
Notice of termination of employment  
Sick Pay  
Protection of employment upon the transfer of a business  
No unlawful deductions from wages  
Redundancy pay  
Maternity pay  
Limits on working time  
Paid annual leave

Employment law requires that employees receive a statement of employment within two months of starting work. The statement of employment should contain:

The name of your employer and your name  
The date your employment started  
Your job title and a summary of your duties  
The period of employment stating whether it's a permanent position  
The place of work  
How much you will be paid, how often and the method of payment. It should also include information such as travel allowances and any deductions from pay  
Hours of work  
Holiday entitlement  
Procedures for dealing with absence from work through illness, or for other reasons and how to notify the employer if absent  
Details of pension scheme if applicable  
Details of how to terminate employment e.g. length of notice required by both you and your employer  
Disciplinary rules and procedures and these are usually contained in a separate document such as a staff handbook  
Grievance procedures, again this could be included in a staff handbook

Information on the following items could also be included in the statement, or alternatively in a staff handbook:

Appraisal arrangements  
Training and development  
Trade union membership  
Health and safety matters  
Maternity rights  
Redundancy policy  
Company vehicles  
Smoking policy

### **Essential Skills**

Essential Skills in Application of Number and Communication must be delivered for all learners who do not have a valid exemption.

Guidance relating to Essential Skills is contained in the Department for Employment and Learning (DEL) Training for Success Operational Guidelines.

## **Health and Safety**

This element of the employability training should focus primarily on familiarising learners with the main aspects of legislation and the regulations that are designed to keep people safe in the workplace and most importantly how these regulations are applied on worksites and in the workshop environment. Coverage of the main Health and Safety regulations are contained in mandatory units of the Technical Certificates and will contribute to the learning that is required.

## **Commencement of Technical Certificate**

It may be possible to commence the Technical Certificate during the Employability Training phase. If this is not the case then the Technical Certificate should commence as early in the programme as possible.

## **Basic Engineering Skills**

This is an opportunity for training providers to assess the potential of the young person's capability of undertaking an engineering programme and should consist of very basic examples of engineering including:

- Drawing appreciation
- Measuring and marking out
- Identifying and using basic hand tools

## **Development of Employability Skills**

The training aims outlined above should also be complemented by a programme which is specifically designed to prepare the learners for the reality of life in the world of work. This programme might include the following:

- Tips on how to approach employers
- How to make a good impression
- Communication techniques
- Confidence building
- Preparing a CV

Job application letter  
Team working  
Acting on own initiative  
Problem solving

### **Work Placement**

This gives the learner an opportunity to experience the real world of work and to see how their knowledge and skills can be applied in this, to them, new environment.

It is recommended that initially only employers with a history of providing apprenticeships should be permitted to provide work placements. Proper company selection is crucial to the success of the work placement and having a friendly, caring and competent mentor in the company will enhance the learner's experience.

Work placements in the occupational area chosen by the learner may not always be available. If this is the situation learners should, if possible, take up an alternative work placement in another area of engineering related to the learners chosen skills path. This will enable the learner to gain valuable transferable skills that can be later applied within his/her chosen occupational area.

If this situation occurs Training Suppliers must be able to clearly demonstrate that specific efforts have been made to find a suitable work placement in the appropriate occupational area and set out the reasons for being unable to identify such a placement. The benefits and outcomes of any such alternative work placement should be built into the learner's Personal Training Plan.

In the event that a learner is unable to find a work placement, then the learner should remain in directed training with the Training Supplier. If this is the situation the Training Supplier must be able to clearly demonstrate that specific efforts have been made to find a suitable work placement and set out the reasons for being unable to source such a placement.

Where work placement is unavailable the Training Supplier must build into the learners Personal Training Plan, the activities and outcomes that will be provided in-house, that will develop those skills and attributes which would

otherwise have been gained in a work placement. This in-house period should also contain an element of directed job search activity.

All work sampling placements must be formalised through the completion of a training agreement between the learner, the delivery centre and the employer and outline exactly what is required from each part during the duration of the placement.

### **Progression**

After successful completion of the Pre-Apprenticeship Framework, learners should be ideally positioned to progress onto a full Engineering Apprenticeship programme undertaking the appropriate National Vocational Qualifications and Technical certificates. Progression details are outlined in the Engineering Apprenticeship Frameworks at Levels 2 and 3.