A Foundation Apprenticeship in Information Technology at SCQF level 6

GR53 46 (Hardware/System Support)
GR54 46 (Software Development)

Date Approved	September 2021
Review Date	
End Date	
Version	1.1

This document provides you with information you will require to deliver a Foundation Apprenticeship in Information Technology.

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Version Control			
Version Number	**Revision(s)**	**Approved by**	**Date**
1.0	New Framework Specification post FA developments	Frank Quinn	**October 2020**
1.1	Removal of GL55 46 and GL54 46 FA group awards	Deborah Miller	**September 2021**
1.2	Addition of Assessment Arrangements 23/24	Deborah Miller	**July 2023**
1.3	Removal of Customised Units and Update of Assessment Arrangements	Deborah Miller	**September 2024**

Background

One of the key recommendations of Sir Ian Wood's review on developing the young workforce was to "develop better connectivity and co-operation between education and the world of work to ensure young people at all levels of education understand the expectations of employers, and that employers are properly engaged" (Scottish Government response to "Developing the Young Workforce; 2015). The Scottish Government set ambitious targets to ensure this connectivity is delivered through a partnership of schools, colleges/training providers and employers.

Skills Development Scotland (SDS), alongside other partners, is working with industry to increase the range of work-based learning opportunities for pupils in the senior phase of secondary schools. One of the ways this is being achieved is through the development of Foundation Apprenticeships and SDS is leading this initiative. Foundation Apprenticeships will allow pupils to gain vocational qualifications that combine sector specific skills alongside the knowledge that underpins these skills in a workplace setting while still at school.

The Foundation Apprenticeship in Information Technology is designed to provide S5 and S6 pupils opportunities to develop skills and knowledge for entry into a career in the IT sector. It also contributes directly to achievement of the Modern Apprenticeship in IT and Telecoms by attainment of the core units of the MA qualification.

The Information Technology sector in Scotland

There are more than 7,000 workplaces in Scotland's IT & Telecoms industry – 84% of which are IT and 16% Telecoms. 89% of these are services orientated. Though micro firms make up 92% of the number of IT & Telecoms workplaces in Scotland, they employ just 25% of the sector workforce. By contrast, companies with 200 or more employees make up less than 1% of the number of workplaces but employ the largest proportion (37%) of the workforce.

In terms of its workforce, there are 100,000 people (or one in every twenty fifth person working in Scotland) employed in IT & Telecoms – 56,000 (56%) of which work in the IT & Telecoms industry itself with a further 44,000 (44%) working as IT or Telecoms professionals in other industries.

In Scotland, nearly two fifths (38%) of IT & Telecoms professionals work in software roles, and over the last decade the number of software professionals has grown by over a half (56%).

Why choose Information Technology?

Scotland is highly dependent on its IT & Telecoms workforce – it underpins the economy and is integral to information, business and consumer services, health and leisure and modern day social networking. Across all industries in Scotland it is the combination of its highly skilled IT & Telecoms professionals, technology-savvy business leaders and competent IT users that enable their organisations' effective participation in the global digital economy.

Currently the IT & Telecoms industry contributes in excess of £3 billion or 3% of Scotland's total Gross Value Added (GVA). Optimisation of the use of IT & Telecoms by businesses could generate an additional £3.7bn GVA to the Scottish economy over the next 5 to 7 years. It is estimated that this GVA uplift could translate into 39,000 new jobs, across many occupations and sectors, over the next 5 to 7 years.

The IT industry covers a wide range of job roles such as:

- IT Technical Support
- Software Developer (including Apps and Games)
- Web Developer
- Database Administrator
- Information (including Cyber) Security

What is the Foundation Apprenticeship in Information Technology?

The Foundation Apprenticeship (FA) in Information Technology is for pupils in S5 and S6 and typically takes 2 years to complete. Increasingly the framework is also available over a shorter duration, typically a single academic year.

Irrespective of the delivery model, the Information Technology framework includes three core elements, namely:

1. National Progression Award in Information Technology
2. Work Based Challenge Unit
3. Work Based Learning units

Pupils complete one of two National Progression Awards (NPA) at SCQF level 6, depending on their chosen pathway. There are two available pathways covering the main clusters of job roles in the IT sector:

- Pathway 1: Hardware / System Support
  NPA in Professional Computer Fundamentals

- Pathway 2: Software Development
  NPA in Software Development

The full programme specification is outlined further in this document.

Background / rationale

This Foundation Apprenticeship supports the commitment to provide relevant work-based vocational education and training as part of the senior phase curriculum. This will prepare young people for direct entry into a career in the IT sector by equipping them with the necessary skills and knowledge to work effectively from day one of employment. This includes both the development of practical and technical skills alongside the development of learner meta-skills, supported via project-based learning. It also highlights meaningful vocational pathways as challenging and valuable alternatives to existing academic subjects.

Partnership

A Foundation Apprenticeship is about the right balance between delivering the taught elements of the programme (the NPA) and the development of work-based competences the meta-skills and work-based learning elements.

Development of true competence depends on the continuing acquisition and application of underpinning skills and knowledge. Young people need to build real workplace skills including both those that are specialist to the chosen career and the generic behaviours and attributes that apply to any workplace. This is achieved in a real work setting involving meaningful activities introduced throughout the programme.

Foundation Apprenticeships are delivered by partnerships comprised of school, learning provider and employer. The learning provider is responsible for the approvals, delivery, assessment and quality assurance of the component units and qualifications. Where multiple learning providers are involved, arrangements between them will be detailed in an SQA Partnership Agreement.

The learning provider must have the appropriate SQA centre and qualification approvals in place before it can deliver the Foundation Apprenticeship.

For further support and guidance on SQA's approval, quality assurance processes and SQA Partnership Agreements, please see:

https://www.sqa.org.uk/sqa/101347.html

Employers are an essential part of the partnership and can contribute in a range of ways, from creating a workplace challenge, to coaching and mentoring, to interviewing and selection. They may also be involved in the assessment of the work-based learning element.

Pastoral Care

The young people embarking on this Foundation Apprenticeship are school pupils and therefore all those involved in delivering the programme have a duty of care. This includes providing appropriate health and safety training and measures to ensure the safety of the young people, including relevant safeguarding requirements that are required by respective Local Authority and School partners. This must be in the context of the specific workplaces of the individual pupils (one of the mandatory units of the FA covers health and safety).

In addition, a workplace mentor must be assigned to be a point of contact for the young person when they are not in the school environment.

Work placement allocation and methodology, whether on-site or through remote working, should take cognisance of the learner's personal circumstances to maximise the learner experience and opportunity.

How should the Foundation Apprenticeship in Information Technology be delivered?

Often, delivery and assessment of the relevant NPA occurs at the start of the programme so that the underpinning knowledge can be obtained before contextualising within the work-based learning element.

The work-based challenge unit is designed to support the contextualisation of the National Progression Award, and therefore should be seen as a complementary unit to run concurrent with the NPA.

The work-based learning element is designed to offer the learning access to the workplace, either physically onsite or through remote working. Learning providers are required to identify host employer(s) to provide the work placement opportunity. Employer(s) are asked to provide

real work activity aligned to the organisations objectives and to support the development of evidence for assessment against the outcomes

Involvement of industry is encouraged across the entire programme of learning. Learner success is best reflected when the delivery of the theory and practical elements are aligned. This approach maximises the contextualisation for the learner and offers the opportunity to put into practice underpinning learning.

<u>Work Based Challenge Unit/Meta-skills:</u>

The WBCU set at SCQF L6 has been designed to support the delivery of the NPA. Providers are asked to engage with employer(s) to identify a suitable project that will complement the learning outcomes within the NPA units.

Incorporated within the WBCU is a meta-skills framework designed to emphasise the importance of meta-skills to industry in addition to technical and practical ability. Through the project associated with the WBCU, learners are required to understand meta-skills and consider which they are likely to develop through their role in the project. Reflective practice is central to the development meta-skills throughout the project. Learners are asked to reflect on their meta-skills development and record this alongside their evidence base.

For further information on the WBCU and meta-skills, please refer to the link provided at the end of this document.

<u>Work Based learning Element:</u>

The Information Technology FA contains units aligned to the respective modern apprenticeship programmes. Providers are encouraged to utilise the SVQ route where physical access to the workplace remains and assess in accordance to the SVQ assessment standards required for external verification.

Please refer to the Foundation Apprenticeship Product Specification for further information on the principles of Foundation Apprenticeship delivery.

Please refer to the Annex's at the end of this document for a detailed breakdown of the units and codes within the framework(s)

- *Annex 1:   FA IT Hardware/Systems*
- *Annex 2:   FA IT Software Development*

Certification

SQA will issue the commemorative certificate for the Foundation Apprenticeship.

Learning providers must ensure that they have appropriate approvals in place with SQA for the Foundation Apprenticeship and all mandatory components. Candidates must be entered and resulted for all relevant units for verification and certification purposes.

Once all contributing results are entered on SQA systems, the candidate's commemorative certificate will be produced.

SQA Awarding Body quality assurance requirements apply to the delivery of the SQA component units and group awards. Centres are required to sign up to the relevant Assessment Strategy for the SVQ and comply with all its requirements.

Information Technology placements for the Foundation Apprenticeship

Placements for pupils undertaking a Foundation Apprenticeship in Information Technology should provide the opportunity either to:

- Have significant input to a long-term project involving requirements gathering, design, development and implementation phases such as the development of a software application or web site;

or

- Contribute to the systematic investigation of reported faults or incidents, and determination of solutions involving a range of IT systems.

Learner Selection and Entry Requirements

The Foundation Apprenticeships in Information Technology are aimed at pupils with an interest and enthusiasm in exploring this area of work. Although set at SCQF L6, due to the contextualised learning experience where underpinning theory and practice are aligned with industry, learners operating at SCQF L5 or above on arrival are encouraged.

Equalities

We expect those involved in the development, recruitment and delivery of Foundation Apprenticeships to be pro-active in ensuring that no-one should be denied opportunities because of their age, disability, gender reassignment, marriage and civil partnership, religion or belief, sex or sexual orientation or pregnancy and that any barriers (real or perceived) are addressed to support all pupils. These are the protected characteristics of the Equality Act 2010 and training providers and employers must comply with this Act to ensure that applicants are not discriminated against in terms of entry to and promotion within the industry.

Our emphasis throughout is upon equality and diversity both for new entrants to the sector and opportunities for progression for the existing workforce.

Learner Progression

Foundation Apprenticeships are directly aligned to three primary progression pathways. These are:

- Modern Apprenticeship
- Further Education
- Higher Education

Modern Apprenticeship:

A pupil completing the Foundation Apprenticeship in Information Technology will have achieved a large proportion of the requirements for a Modern Apprenticeship in IT and Telecoms Modern Apprenticeship at SCQF level 6.

Further Education:

All Scottish further education colleges recognise the Foundation Apprenticeship in IT as an eligible qualification towards Higher National provision, alongside other qualifications.

Higher Education:

Scottish universities recognise the Foundation Apprenticeship in Information Technology as an eligible qualification towards under-graduate degrees and graduate apprenticeship provision, alongside other qualifications.

Recognition of Prior Learning

SQA's policy is to recognise prior learning as a method of assessing whether a learner's experience and achievements meet the evidence requirements (i.e. the standard) of a SQA Unit or Units and which may or may not have been developed through a course of learning.

More information can be found on the **SQA website**

Foundation Apprenticeships – assessment arrangements 2024/25

SQA and SDS can confirm that learners who are starting a Foundation Apprenticeship in 2024-25, completing in 2025 or beyond, must be assessed using the original Foundation Apprenticeship frameworks and accordingly, learn and be assessed in a workplace.

Foundation Apprenticeships Framework Specification:
IT: Hardware / System support at SCQF Level 6

GR53 46 Foundation Apprenticeship in Information Technology: Hardware / System Support			
Group Award Title	**Unit Title**	**SCQF Level**	**SCQF Credits**
GG0F 46 **NPA in Professional Computer Fundamentals**	H2N5 12 Security Fundamentals	6	6
	H2N6 12 Network Fundamentals	6	6
	H2N7 12 Server Administration Fundamentals	6	6
	J4YL 04 Work Based Challenge	6	6
Work Based Learning *(GL2R 46)* *Diploma for Information Technology and Telecommunications Professionals*	H3C5 04 Health and Safety in IT & Telecom	4	1
	H39S 04 IT & Telecom System Operation 2	6	12
	H3AV 04 Testing IT & Telecom Systems 2	6	12
	H3B5 04 Working with IT & Telecoms Hardware and Equipment 1	5	7
Foundation Apprenticeship Certification Unit	HE6E 04 Foundation Apprenticeship Certification Unit	-	0
TOTAL SCQF CREDIT POINTS			**56**

One SCQF credit point is equivalent to ten (10) notional hours of learning.

Foundation Apprenticeships Framework Specification:
IT: Software Development at SCQF Level 6

Group Award Title	Unit Title	SCQF Level	SCQF Credits
GR54 46 Foundation Apprenticeship in Information Technology: Software Development			
GL4W 46 NPA in Software Development	H6S9 46 Computing: Applications Development	6	6
	F3T2 12 Computing: Authoring a Website	6	6
	J27C 76 Software Design and Development	6	9
	J4YL 04 Work Based Challenge	6	6
Work Based Learning (GL2R 46) *Diploma for Information Technology and Telecommunications Professionals*	H3C5 04 Health and Safety in IT & Telecom	4	1
	H3AH 04 Investigating and Defining Customer Requirements for IT & Telecoms Systems 2	6	12
	H3BA 04 Data Modelling 1	5	4
	one from		
	H3A4 04 Event Driven Computer Programming 2	6	12
	H3AE 04 Procedural Programming 2		
	H3AB 04 Object Oriented Computer Programming 2		
Foundation Apprenticeship Certification Unit	HE6E 04 Foundation Apprenticeship Certification Unit	-	0
TOTAL SCQF CREDIT POINTS			**56**

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