apprenticeship FRAMEWORK

Digital Telecommunications (Wales)

Latest framework version?

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Prentisiaethau Apprenticeships

Digital Telecommunications (Wales)

Contents

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Framework information

Information on the Issuing Authority for this framework:

Instructus

The Apprenticeship sector for occupations in air conditioning, building services engineering, business and administration, cleaning, customer service, digital/information technology, electro technical, electrical and electronic servicing, enterprise and business support, facilities management, heating and ventilating, housing, human resources and recruitment, industrial relations, leadership and management, marketing and sales (also includes contact centres and third sector), plumbing, property and refrigeration.

Issue number: 1	**This framework includes:**
Framework ID: FR04303	Level 2 ☐ Level 3 ☒ Level 4-7 ☒
Date this framework is to be reviewed by: 31/03/2021	**This framework is for use in: Wales**

Short description

The Welsh Government considers the ICT sector to be a driving force in both economic development and wider social change. It encourages productivity and competiveness across the economy.

The ICT sector in Wales is global and dynamic with the country well positioned to design, develop and commercialise leading edge technologies. It includes a wide range of companies from bluechip corporates through to innovative Small and Medium Enterprises across:

- IT services
- software
- **telecommunications**
- electronics.

This framework covering Levels 3 and 4 complements existing frameworks in IT services and

Apprenticeship Certification Wales

Software

Contact information

Proposer of this framework

The Welsh Government and Instructus

Developer of this framework

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Revising a framework

Why this framework is being revised

Framework Developer to complete with relevant info

Summary of changes made to this framework

Framework Developer to complete with relevant info

Qualifications removed

Framework Developer to complete with relevant info

Qualifications added

Framework Developer to complete with relevant info

Qualifications that have been extended

Framework Developer to complete with relevant info

Purpose of this framework

Summary of the purpose of the framework

The Welsh Government believes that a strong ICT sector is critical to Wales. We're committed to supporting the growth of the sector through continuing to:

- support Welsh businesses
- work closely with academia
- create a world-class infrastructure
- attract top class companies.

ICT can enable increased trade and globalisation creating a 'flatter' world with more competition and more opportunities for Welsh businesses. It also plays a pivotal role in:

- helping meet the challenges of climate change
- the creation of smart grids
- delivering key policy interventions in areas such as social inclusion and public service delivery.

Aims and objectives of this framework (Wales)

This framework will contribute towards meeting the following skills priorities for Wales:

- Skills for Jobs: The National Strategic Skills Audit for Wales; June 2011
- The Minister's response to the WESB report on Skills for Jobs Priorities
- Growth and Sustainable Jobs
- Digital Wales

Entry conditions for this framework

There are no specific entry criteria for this framework.

However in general, learners should possess qualifications (or equivalent experience) at the levels immediately below the level of the award. For example, candidates may have a qualification at CQFW level 2 or 3.

Level 3

Title for this framework at level 3

Digital Telecommunications

Pathways for the framework at level 3:

Pathway 1:   Digital Telecommunications

Apprenticeship Certification
Wales

Level 3, Pathway 1: Digital Telecommunications

Description of this pathway

This pathway covers all job roles in the Information Security sector.

This framework requires a minimum of 78 credits (including Essential Skills Wales).

Entry requirements for this pathway in addition to the framework entry requirements

There are no additional requirements other than the general entry conditions.

Job title(s)	Job role(s)
Telecoms Installation Engineer	Participating in the installation and testing of Telecoms systems
Telecoms Support Assistant	Providing technical support to users of Telecoms systems

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

B1 – Level 3 Diploma in Digital Telecommunications					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
B1a	C00/1239/2	Agored Cymru	60	172	600

Relationship between competence and knowledge qualifications

N/A

Essential Skills

An apprenticeship framework must specify as a Welsh certificate requirement the expected achievement levels of Essential Skills in Communication and the Application of Number, and Digital Literacy (where required).

ESSENTIAL SKILLS WALES

Communication	**Min.Level 2**
Application of Number	**Min.Level 2**
IT/Digital Literacy	**Min.Level 2**

For the current list of acceptable proxy qualifications and appropriate minimum grade/level requirements, please refer to the most recent version of SASW on the gov.wales website. Additional guidance materials can be found on the Knowledge Base section of the ACW website.

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Progression routes into and from this pathway

Entry into this apprenticeship programme may be:

- directly from school or college with the suggested level of academic qualifications
- directly from university
- as a career transition from a general IT role or business role.

The Level 3 Apprenticeship programme offers successful apprentices the opportunity to further progress in their studies and go on to undertake a related degree programme.

They could select from Bachelors degrees, Foundation degrees, Higher Nationals or another higher level qualification. Apprentices may also elect to continue within their job role and pursue their learning by undertaking additional technical, business or managerial level training and qualifications.

Apprentices who have completed a Level 3 apprenticeship programme have often progressed within their career to take on team leader or senior level positions, utilising their expanding technical expertise – and guiding and training others within the organisation.

UCAS points for this pathway:

N/A

Employee rights and responsibilities

Please note that for Apprenticeship starts from 14/10/2016 onwards ERR is no longer a **mandatory** requirement in all frameworks.

However, it may still be included in some frameworks and where it is not explicitly stated that ERR is not a requirement then confirmation of an Apprentice's ERR achievement will still remain a requirement for Apprenticeship certification purposes.

Is ERR a requirement for this framework?   **YES**   ☐   **NO**   ☒

Delivery and assessment

Framework Developer to complete with relevant info

Level 4

Title for this framework at level 4

Digital Telecommunications

Pathways for the framework at level 4:

Pathway 1:   Digital Telecommunications

Level 4, Pathway 1: Digital Telecommunications

Description of this pathway

This pathway covers all roles in Digital Telecommunications.

A minimum of 75 credits is required.

Entry requirements for this pathway in addition to the framework entry requirements

Candidates wishing to enter a Higher Apprenticeship will need to have achieved or demonstrated one of the following:

- A Levels, or equivalent educational attainment, including the Level 3 IT Diploma, Welsh or
- International Baccalaureate or other relevant Level 3 or 4 qualifications
- An Apprenticeship (Level 3)
- Employment within the technology/telecommunications industry for a number of years and demonstrated to their employer that they have a reasonable expectation of achieving the required outcomes of the Higher Apprenticeship. This can be supported by the demonstration or evidence of prior achievement or performance in the role prior to starting the Higher Apprenticeship.

Potential apprentices should bear in mind that a Higher Apprenticeship combines the challenges of higher-level education with full-time employment, and should be prepared for the greater volume and level of study than in the Apprenticeship or another Level 3 qualification.

Job title(s)	Job role(s)
Senior Telecoms Support Engineer	Providing advanced technical support to users (and potential users) of Telecoms systems
Project Manager - Telecoms	Leading the installation or upgrade of Telecoms systems

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

B1 – Level 4 Diploma in Digital Telecommunications					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
B1a	C00/1239/3	Agored Cymru	75	247	70

Relationship between competence and knowledge qualifications

N/A

Essential Skills

An apprenticeship framework must specify as a Welsh certificate requirement the expected achievement levels of Essential Skills in Communication and the Application of Number, and Digital Literacy (where required).

ESSENTIAL SKILLS WALES

Communication	**Min.Level 2**
Application of Number	**Min.Level 2**
IT/Digital Literacy	**Min.Level 2**

For the current list of acceptable proxy qualifications and appropriate minimum grade/level requirements, please refer to the most recent version of SASW on the gov.wales website. Additional guidance materials can be found on the Knowledge Base section of the ACW website.

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Progression routes into and from this pathway

Following the completion of the Level 4 Higher Apprenticeship framework, successful apprentices will be able to follow up on their knowledge studies and continue on to complete full Honours degree programmes.

UCAS points for this pathway:

N/A

Apprenticeship Certification
Wales

Employee rights and responsibilities

Please note that for Apprenticeship starts from 14/10/2016 onwards ERR is no longer a **mandatory** requirement in all frameworks.

However, it may still be included in some frameworks and where it is not explicitly stated that ERR is not a requirement then confirmation of an Apprentice's ERR achievement will still remain a requirement for Apprenticeship certification purposes.

Is ERR a requirement for this framework?   **YES**   ☐   **NO**   ☒

Delivery and assessment

Framework Developer to complete with relevant info

The remaining sections apply to all levels and pathways within this framework.

How equality and diversity will be met

Instructus Digital Telecommunications Framework offers no barriers to entry and is intended to accommodate all learners regardless of gender, age, disability or ethnic origin.

The learning content required for the off-the-job learning can be delivered in a number of different learning styles to accommodate learner requirements.

Instructus expects employers and training providers to comply with current Equality legislation to ensure that applicants are not discriminated against in terms of entry to, and progression within the sector, using the protected characteristics.

The following sections are included to identify current workforce demographics. (Data refers to the UK as a whole and to the whole of the IT & Telecoms sector of which Digital Telecommunications is a part)

GENDER EQUALITY
Gender imbalance remains a significant issue for the IT & Telecoms sector. Considering IT & Telecoms professional job roles across all sectors, there has been a drop of female representation from 22% in 2001 to 18% in 2011. This compares to the overall UK workforce being 48% female.

As is the case in industry, gender imbalance is prevalent across IT-related courses, and this is worsening over time throughout the education system. 15% of applicants to Computing degree courses are female and the proportion of females who sat the 2013 Computing A-Level is 6.5%, 1.3 percentage points lower than in 2012.
This under-representation of women across the whole IT & Telecoms sector has a number of causes including:

- a lack of awareness (by both individuals and career advisors) of the broad range of career opportunities available

- confusion in school teaching of ICT between IT User and IT professional roles

Instructus has initiated or participated in a number of programmes to address this gender gap and encourage girls to consider a career in IT & Telecoms.

AGE OF WORKFORCE

Analysis of the period 2001-2011 shows a changing trend in the age profile of IT & Telecoms professionals. The proportion of people aged 16-29 has dropped from 33% in 2001 to 19% in 2011.

The average age of IT & Telecoms professionals working in the UK is estimated to be 39 years old, compared with 41 years old for workers more generally. Just under one half (47%) of IT & Telecoms professionals are aged 40 or above and less than one in five (19%) are in the 16-29 age bracket.

A key contributory factor to this changing dynamic in IT & Telecoms is the effect of globalisation. The maintenance of strong apprenticeship programmes in the sector will be vital to ensure that this trend can be halted or reversed in the coming years, thereby ensuring that the sector has the pipeline of skilled professionals that it requires to move into higher level job roles in 5-10 years time.

ETHNICITY AND DISABILITY

The Information and communication technologies industry is one of the most ethnically diverse industries in the UK, with 13 per cent of the workforce (an increase from 8% of the workforce in 2002) coming from Black, Asian and Minority Ethnic backgrounds compared to nine per cent across the whole economy.

There is significant provision for individuals with disabilities throughout the IT & Telecoms sector with many, varied opportunities for rewarding careers at all levels. This in turn means that apprenticeships are available in a wide range of areas for those with differing levels of disability.

On and off the job training

Summary of on- and off-the-job training

The minimum total number of training hours which each apprentice must receive is:

-   for level 3: 780 hours (inclusive of Essential Skills Wales).
    for level 4: 750 hours

Recognition of prior learning (RPL) is encouraged e.g. relevant content from the Welsh Baccalaureate.

Training hours are delivered during contracted working hours under an Apprenticeship Agreement, or must have been completed no more than three years prior to commencing the apprenticeship.

On and off the job training hours:

must be planned, reviewed and evaluated jointly between the apprentice and tutor, teacher, mentor or manager;
must allow training support via a tutor, teacher, mentor or manager;
may be delivered through one or more of the following methods: individual and group teaching, e-learning, distance learning,

Off-the-job training

Off-the-job training are those learning activities undertaken away from normal work duties.

The minimum required is:

 352 hours.at level 3 (including Essential Skills Wales); a

nd 247 hours at level 4

How this requirement will be met

Off-the-job learning will be required for the Apprentice to achieve the designated knowledge units of the combined Diploma qualification and necessary underpinning knowledge for other units. This may involve a combination of day release, block release, web based learning, mentoring and coaching.

On-the-job training

An apprentice must receive a minimum number of hours on the job training:

428 for level 3

503 for level 4

How this requirement will be met

An Apprenticeship programme is fundamentally designed to be a work-based programme, whereby instructor-led learning can be immediately applied by apprentices in a real work context

The qualification contained in the framework reflects the overall design of an apprenticeship,containing some units which are designed to be delivered off-the-job and competence based units which are designed to be delivered on-the-job.

Wherever possible, the competences should be assessed holistically in the workplace, ensuring that any knowledge elements in the units are learned in the work and organisational context.This can be recorded by any suitable means including, for example, portfolios of work, performance reviews and work logs/diaries

The discrete knowledge units must be taught 'off-the-job' and assessed using assignments or tests in order to ensure the apprentice has gained an appreciation of the wider impact of Information Security in business and society and understands the underpinning theory and principles required for their role.

An Apprentice can plan and review their use of predefined or commonly used tools and techniques for complex and non-routine activities. As a result of reviewing their work, they will be able to devise solutions in the use of these in order to improve productivity for themselves and others.

Through coaching on-the-job, they will develop transferable skills and techniques for self-help and in turn be prepared to offer support and advice to others.

Evidence of guided learning hours undertaken should be recorded in the apprentice's Individual Learning Plan, and updated at 12 week reviews throughout the programme.

Wider key skills assessment and recognition

While Wider Key Skills are not a **mandatory** part of the framework, training providers are encouraged to provide apprentices the opportunity to achieve them.

For this framework, there are natural opportunities for Wider Key Skills to be embedded within the mandatory units of the following qualifications:

Enter Qualification Names

Improving own learning and performance

Give examples - signpost to specific units in framework qualifications that would meet these requirements

Working with others

Give examples - signpost to specific units in framework qualifications that would meet these requirements

Problem solving

Give examples - signpost to specific units in framework qualifications that would meet these requirements

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