apprenticeship FRAMEWORK

The Water Industry (Wales)

IMPORTANT NOTIFICATION FOR ALL APPRENTICESHIP STARTS FROM 14 OCTOBER 2016

Modifications to SASW came into effect on 14 October 2016. These changes relate to the Essential Skills and Employer Rights and Responsibilities requirements of a framework and they ONLY apply to new Apprenticeship starts on, or after, 14th October. Apprenticeship starts before this date must continue to meet the 2013 SASW requirements for Essential Skills and Employer Rights and Responsibilities.

For more details of the changes and how they will affect new apprenticeship starts, please read the following preface page to the framework document. NB: Please check the "Revising a Framework" section for information on any additional changes that may have been made to this framework.

Latest framework version?

Please use this link to see if this is the latest issued version of this framework:

afo.sscalliance.org/frameworkslibrary/index.cfm?id=FR03181

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CHANGES TO REQUIREMENTS FOR APPRENTICESHIP STARTS FROM 14TH OCTOBER 2016

These changes relate to the Essential Skills and Employer Rights and Responsibilities requirements of a framework and they ONLY apply to new Apprenticeship starts on, or after, 14th October 2016. Apprenticeship starts before this date must continue to meet the 2013 SASW requirements for Essential Skills and Employer Rights and Responsibilities.

Alternatives for Essential Skill qualifications

Foundation apprenticeships (Level 2): Where Essential Skills qualifications are specified in a foundation apprenticeship framework (Level 2), the apprenticeship framework must specify as a Welsh certificate requirement, the acceptance of one of the following recognised proxy qualifications.

For Communication:

- a. GCSE or iGCSE qualification in English language or literature to at least grade G (Level 1 equivalent); or
- b. O Level qualification in English language or literature to at least grade E; or
- c. A/AS Level qualification in English language or literature to at least grade E; or
- d. SCQF Level 4 Communication Core Skills (Oral communication and written communication); or
- e. SQA National 4 English; or
- f. Functional Skills or Key Skills literacy qualifications in English provided the proxy qualification(s) attained are at Level 1 or above.

For Application of Number:

- a. GCSE or iGCSE qualification in Mathematics to at least grade G (Level 1 equivalent); or
- b. O Level qualification in Mathematics to at least grade E; or
- c. A/AS Level qualification in Mathematics to at least grade E; or
- d. SCQF Level 4 Numeracy Core Skill (Graphical Information and using number); or
- e. SQA National 4 Mathematics; or
- f. Functional Skills or Key Skills numeracy qualifications in Mathematics provided the proxy qualification(s) attained are at Level 1 or above.

Apprenticeships (Level 3): Where Essential Skills qualifications are specified in an apprenticeship framework (Level 3), the apprenticeship framework must specify as a Welsh certificate requirement, the acceptance of one of the following recognised proxy qualifications.

For Communication:

- a. GCSE or iGCSE qualification in English language or literature to at least grade C (Level 2 equivalent); or
- b. O Level Qualification in English language or literature to at least grade C; or
- c. A/AS Level qualification in English or literature to at least grade E; or
- d. SCQF Level 5 Communication Core Skills (Oral communication and written communication); or
- e. SQA National 5 English; or
- f. Functional Skills or Key Skills literacy qualifications in English provided the proxy qualification(s) attained is at Level 2 or above.

For Application of Number:

- a. GCSE or iGCSE qualification in Mathematics to at least grade C (Level 2 equivalent); or
- b. O Level Qualification in Mathematics to at least grade C; or
- c. A/AS Level qualification in Mathematics to at least grade E; or
- d. SCQF Level 5 Numeracy Core Skill (Graphical information and using number); or
- e. SQA National 5 Mathematics; or
- f. Functional Skills or Key Skills numeracy qualifications in Mathematics provided the proxy qualification(s) attained are at Level 2 or above.

Higher Apprenticeships (Levels 4-7): Essential Skills requirements are as for an apprenticeship frameworks at Level 3.



CHANGES TO REQUIREMENTS FOR APPRENTICESHIP STARTS FROM 14TH OCTOBER 2016

Employer Rights and Responsibilities (ERR)

The final modification to SASW is to Employer Rights and Responsibilities (ERR) which is no longer compulsory in frameworks. Please refer to the Employer Rights and Responsibilities section within the framework document to confirm specific requirements.

Additional Information

It should be noted that SASW has also been modified to reflect existing improvements to Essential Skills Wales Qualifications. These improvements to ESW qualifications were signalled by the revised names:

- Essential Skills Wales Communication is now Essential Communication Skills (still 6 credits in size)
- Essential Skills Wales Application of Number Skills is now Essential Application of Number Skills (still 6 credits in size)
- Essential Skills Wales Information Communication Technology Skills is now Essential Digital Literacy Skills (still 6 credits in size)

Whilst there have been some amendments to the content of ESW qualifications, the most significant change has been to the assessment methodology for these qualifications.

From 1 January 2016, all new starts have had to follow the revised Essential Skill qualifications.

The updated version of SASW, and guidance documents, can be accessed here: http://gov.wales/topics/educationandskills/skillsandtraining/apprenticeships/providers/?lang=en&dgd

Over the coming months, the Essential Skills section within AFO will be amended to reflect the SASW modifications and all current frameworks will be updated and reissued to incorporate these changes. In the meantime, if you are in any doubt as to the requirements of any framework then please contact the relevant Issuing Authority.



The Water Industry (Wales)

Contents

| Framework summary | 5 |
|--|----|
| Framework information | 7 |
| Contact information | 8 |
| Revising a framework | 10 |
| Purpose of the framework | 12 |
| Entry conditions | 14 |
| Level 2: Foundation Apprenticeship in the Water Industry | 16 |
| Pathway 1: The Water Industry | 17 |
| Pathway 2: Sewerage Operations and Maintenance | 28 |
| Level 3: Apprenticeship in the Water Industry | 36 |
| Pathway 1: The Water Industry | 37 |
| Level 4: Utilities Network Planning and Management | 46 |
| Pathway 1: Utilities Network Planning and Management | 47 |
| Equality and diversity | 54 |
| On and off the job training | 55 |
| Wider key skills | 59 |
| Additional employer requirements | 60 |



Framework summary

The Water Industry

Foundation Apprenticeship in the Water Industry

Pathways for this framework at level 2 include:

Pathway 1: The Water Industry

Competence qualifications available to this pathway:

- C1 CABWI Level 2 Diploma In Distribution Control (QCF)
- C2 CABWI Level 2 Certificate In Leakage Detection (QCF)
- C3 Level 2 Certificate In Network Construction Operations (Water) Service Layer (QCF)
- C4 Level 2 Diploma In Network Construction Operations (Water) Main Layer (QCF)
- C5 Level 2 Diploma In Network Construction Operations (Water) Repair and Maintenance (QCF)
- C6 CABWI Level 2 Extended Diploma in Operating Process Plant (Ground Water Treatment)
- C7 CABWI Level 2 Diploma in Operating Process Plant (Ground Water Treatment) (QCF)
- C8 CABWI Level 2 Diploma in Operating Process Plant (Surface Water Treatment) (QCF)
- C9 CABWI Level 2 Extended Diploma in Operating Process Plant (Surface Water Treatment)
- C10 CABWI Level 2 Diploma in Operating Process Plant (Waste Water Treatment) (QCF)
- C11 CABWI Level 2 Extended Diploma in Operating Process Plant (Waste Water Treatment)
- C12 CABWI Level 2 Diploma in Operating Process Plant (Sludge Treatment) (QCF)

Knowledge qualifications available to this pathway:

- K1 CABWI Level 2 Diploma In Water Engineering (Water Operations) (QCF)
- K2 CABWI Level 2 Diploma In Water Engineering (Network Construction Operations) (QCF)
- K3 CABWI Level 2 Diploma in Water Engineering (Wastewater Operations)
- K4 CABWI Level 2 Diploma in Water Engineering (Water Supply) (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- · Employee rights and responsibilities
- Essential skills

Pathway 2: Sewerage Operations and Maintenance

Competence qualifications available to this pathway:

N/A

Knowledge qualifications available to this pathway:

N/A

Combined qualifications available to this pathway:

B1 - CABWI Level 2 Diploma in Sewerage and Drainage Operations

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

The Water Industry

Apprenticeship in the Water Industry

Pathways for this framework at level 3 include:

Pathway 1: The Water Industry

Competence qualifications available to this pathway:

- C1 CABWI Level 3 Certificate In Maintain Water Supply (Network) (QCF)
- C2 CABWI Level 3 Certificate In Water Fittings Regulations Enforcement (OCF)
- C3 CABWI Level 3 Diploma In Controlling Process Operations (QCF)
- C4 CABWI Level 3 Diploma In Designing Water Networks (QCF)
- C5 CABWI Level 3 Diploma In Leakage Control (QCF)
- C6 CABWI Level 3 Diploma In Managing and Controlling Process Operations (QCF)
- C7 CABWI Level 3 Diploma In Network Construction Operations (Water) (QCF)

Knowledge qualifications available to this pathway:

K1 - CABWI Level 3 Diploma In Water Engineering (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- · Employee rights and responsibilities
- · Essential skills

The Water Industry

Utilities Network Planning and Management

Pathways for this framework at level 4 include:

Pathway 1: Utilities Network Planning and Management

Competence qualifications available to this pathway:

C1 - CABWI Level 4 Diploma In Utilities Network Planning and Management (QCF)

Knowledge qualifications available to this pathway:

- K1 HNC Water Operations
- K2 Edexcel BTEC Level 4 HNC Diploma in Construction and the Built Environment (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- · Employee rights and responsibilities
- Essential skills

Framework information

Information on the Publishing Authority for this framework:

Energy and Utility Skills

The Apprenticeship sector for occupations in electricity, gas and water supply, and waste management (also includes gas utilisation, recycling and waste water collection and treatment)

| Issue number: 6 | This framework includes: |
|---------------------------------------|-------------------------------------|
| Framework ID: FR03181 | Level 2 Level 3 Level 4 |
| Date this framework is to be reviewed | |
| by: 01/10/2016 | This framework is for use in: Wales |

Short description

The water industry faces some key challenges including an ageing workforce, ageing infrastructure, a need to embrace new technologies to meet low carbon targets and a skills deficit in craft, technical and engineering roles.

The purpose of this Foundation Apprenticeship, Apprenticeship and Higher Apprenticeship is to support the industry to address these challenges by developing occupational competence in a wide range of job roles in the water industry.

Contact information

Proposer of this framework

Energy & Utility Skills (EU Skills) has engaged employers on the development of this framework through the Water Industry Strategic Steering Group (WISSG).

WISSG is an established employer-led group of water companies and contractor employers chaired by Pam James of Southern Water. Its purpose is to work collaboratively to formulate skills strategy and drive a programme of key projects to ensure sustainable skills competence in the Industry. WISSG has membership across the UK water industry and reports to Water UK, the representative organisation which brings together all of the UK's water and wastewater utilities.

Membership of WISSG includes:

Anglian Water, Bournemouth & West Hampshire, Bristol Water, Cambridge Water, Dee Valley Water, Dwr Cymru - Welsh Water, Mid Kent Water, Northern Ireland Water, Northumbrian Water, Severn Trent, Scottish Water, South East Water, Southern Water, South Staffordshire Water, South West Water, Thames Water, United Utilities, Wessex Water, Yorkshire Water, Veolia Water, Balfour Beatty, Biwater, Clancy Docwra, Daniel Contractors, Morgan Est, Morrison Utility Services, Mott McDonald, British Water, GMB, The Society of British Water and Wastewater Industries (SBWWI) and UNISON.

A dedicated sub group reporting into WISSG was established to steer development of the sewerage maintenance qualification and Apprenticeship pathway. The organisations represented include Dyno Rod/British Gas, South West Water, Northumbrian Water, WRc, the National Sewerage Association and the Water Jetting Association.

Developer of this framework

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Issued by: Energy and Utility Skills

Issuer contact name: Carolyn Davies Issuer phone: 0845 077 9922

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Revising a framework

Contact details

Who is making this revision: Helen White

Your organisation: Energy & Utility Skills Your email address: enquiries@euskills.co.uk

Why this framework is being revised

This framework has been revised to:

• replace the existing Level 2 Diploma in Water Engineering (Water Supply) with a revised version which aligns more closely with industry practice

Summary of changes made to this framework

See above

Qualifications removed

The following qualification has been removed:

CABWI Level 2 Diploma in Water Engineering (Water Supply) (QCF) - 600/2050/7

Qualifications added

The following qualifications have been included:

CABWI Level 2 Diploma in Water Engineering (Water Supply) (QCF) - 601/3570/0

Qualifications that have been extended

... The Water Industry (Wales)

No qualifications have been extended.



Purpose of this framework

Summary of the purpose of the framework

The water industry is made up of the regulated water utility companies, non-regulated subsidiary water utility companies (i.e. involved in construction, engineering, consultancy, etc.) and the supply chain. Combined, the industry starts at the generation of clean water right through to the stop valve in the customer's property. It also covers the collection and treatment of waste water collected through public sewers and private drains. 7,500 people work in the water industry in Wales; of these, 2,000 people are employed by the regulated water companies and utilities.

There are a number of key drivers for skills and employment within the industry:

- Since privatisation of the water industry in 1989 in England and Wales, regulatory pressure from OFWAT (the economic regulator for the water and sewerage industry in England and Wales) has driven a steady decline in employee numbers as companies seek to achieve efficiency targets with employers having to consider headcount targets over and above retention of key skills and expertise.
- The industry has experienced a low turnover of staff (around 3% p.a.) during the process of downsizing and consequently the historic investment in skills has remained relatively low. However, the industry is now facing an ageing workforce which is forecast to worsen over the next 15 years. Significant additional investment in skills is, therefore, required to refresh the workforce.
- There are also a range of programmes underway to replace, grow and operate assets and
 distribution infrastructures which set new demands on both resource availability and the
 skills levels/mix of the workforce. Although technology has improved the effectiveness of
 these activities over the last 20 years, increasing environmental demands and cost
 pressures require a continuous process of re-evaluating asset investments and operation.
 This process has a direct impact on the workforce at all organisational levels and will
 continue to do so in the future.
- The drive for a UK-wide reduction in carbon emissions to meet climate change commitments is impacting on the industry. The increased use of renewable and low carbon technologies is driving the capability profile of the industry workforce.
- Skills are integrally linked to innovation; as higher skills levels allow workers to generate new ideas and adapt to the changing economic environment. Additionally, with a more skilled managerial and general workforce, organisations are better able to introduce technological and organisational change.
- Critically, the UK water industry is inherent to the maintenance of public health. Water service companies (companies that provide water supply and sewerage services) and water supply only companies must demonstrate to the Drinking Water Inspectorate (DWI) that their workforce is competent before being issued a licence to supply water.

The purpose of this Foundation Appreticeship, Apprenticeship and Higher Apprenticeship is to provide a recruitment and training tool to bring new entrants into the industry and develop job competence in a range of job roles at levels 2, 3 and 4. Examples of these job roles include:

Level 2 - Wastewater Operative - Conduct operational activities on the sewerage network, support the maintenance of public health and support appropriate risk assessment.

Level 3 - Network Design Technician - Assess factors that impact on water network design, provide technical information for the design of water networks, produce detailed drawings to support water network activities and use technical information to review water network drawings.

Level 4 - Leakage Manager - Managing leakage control activities on the water distribution network.

This Apprenticeship provides employers with the ability to develop a sustainable workforce and address current and future skills gaps, critical today where skilled employees are becoming increasingly difficult to recruit.

This Foundation Apprenticeship, Apprenticeship and Higher Level Apprenticeship is a key priority of WISSG.

For further information on the water industry and the drivers for skills and Apprenticeships please refer to the Sector Skills Assessment 2010 available to download at: http://www.euskills.co.uk/home/news/research/

Aims and objectives of this framework (Wales)

Aim:

To contribute to the development of a sustainable workforce for the UK water industry.

Objectives:

- To attract new workers to the industry.
- To develop occupational competence in a wide range of job roles in the industry.
- To facilitate progression within the industry.
- To meet the demand for higher level skills.
- To contribute to meeting the skills priorities for Wales.



Entry conditions for this framework

The Apprenticeship in the Water Industry is open to individuals of any age and does not impose any restrictions to entry. Responsibility for selection and recruitment of Apprentices lies with the employer who will have a clear idea of their requirements.

The qualifications included within the Apprenticeship are demanding, particularly so at Apprenticeship and Higher Apprenticeship level. Many employers will therefore, look for applicants who have gained the Welsh Baccalaureate Intermediate Diploma or above to demonstrate an ability to complete the Apprenticeship. The qualifications within the Foundation Apprenticeship are less complex and consequently employers may relax their recruitment criteria.

Employers must be confident that the potential Apprentice has the learning potential/capacity, motivation and aptitude to achieve all of the mandatory outcomes of the framework. Employers are asked to be flexible when recruiting people onto the Apprenticeship. Where employers/providers have robust learner support systems in place (such as tutorials and mentoring programmes), an individual who historically has not done particularly well at reading, writing and numeracy may thrive on an Apprenticeship where the relevance and application of these subjects is understood.

Individuals that meet the following considerations are likely to be suitable for this Apprenticeship:

- The water industry is potentially very dangerous so the safety of Apprentices, their work colleagues and the public are of the upmost importance. Apprentices must be very safety conscious and have a very responsible attitude to work, working in accordance with company health and safety procedures at all times.
- Any person working on a restricted operations sites such as service reservoirs, pumping stations, treatment works, wells, spring and boreholes and working on the network of water mains and service pipes must be in possession of a National Water Hygiene card, so in most cases Apprentices will be required to undertake the National Water Hygiene training course and assessment during their Apprenticeship. Apprentices must be prepared to undergo health screening to ensure that they are not carriers of any waterborne diseases before a National Water Hygiene Card can be issued.
- Apprentices must be prepared to wear the Personal Protective Equipment (PPE) provided when required.
- These may be physically demanding jobs that involve bending, lifting and manual handling so a basic level of fitness is important to be able to conduct the job efficiently.
- Many of these jobs involve work outdoors, so Apprentices should be prepared to work in any kind of weather.
- Apprentices will need to have good practical skills for handling tools and instruments and be prepared for some hard work. These are very skilled jobs and some aspects require

significant amounts of concentration.

- Some job roles will require shift work to ensure plant and equipment is operational 24 hours a day. Apprentices therefore need to be adaptable and flexible.
- Some of these job roles involve travelling as Apprentices may work at different sites so a driving license is desirable.
- Some of these job roles involve dealing with the general public on a day-to-day basis so Apprentices should be presentable and have a polite and courteous manner.
- Ability to work as part of a team and independently.
- Good self-discipline and timekeeping.
- Apprentices need to be enthusiastic with a positive attitude and a keen interest in the water industry.

Initial assessment

Initial assessment will be used by training providers and/or employers to identify prior learning and experience to tailor the Apprentice's Individual Learning Plan, not for screening out applicants. In the case of APL for competence, knowledge or Essential Skills Wales, the Apprenticeship programme must be tailored to allow the Apprentice to undertake new learning, including learning at a higher level and develop new skills.



Level 2

Title for this framework at level 2

Foundation Apprenticeship in the Water Industry

Pathways for this framework at level 2

Pathway 1: The Water Industry

Pathway 2: Sewerage Operations and Maintenance



Level 2, Pathway 1: The Water Industry

Description of this pathway

The Foundation Apprenticeship in the Water Industry requires a minimum total of 72 credits to be achieved. These are broken down as follows:

- 23 for competence
- 37 for knowledge
- 12 for ESW in Communication and Application of Number

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

There are no entry requirements for this pathway in addition to the general framework entry requirements.

| Job title(s) | Job role(s) |
|---------------------------------|---|
| Water Distribution Operative | Address customers' water distribution related enquiries, carry out valve operations on the distribution network, determine the exact location of water loss, cleanse and disinfect water mains, carry out sampling operations, measure system performance, provide and maintain emergency water supplies. |
| Leakage Operative | Ensure actions reduce risks to health and safety in the industry, assess the configuration of the metered area on the water supply network, trace the route of water pipes and locate surface fittings, determine the location of water loss. |
| Water Mainlayer | Using maps and plans to locate digging location, preparing excavations by hand or use of mechanical equipment, laying and repairing mains pipes or systems and making connections to the water network. Repairing excations and pavements on completion of work. |
| Water Servicelayer | Using maps and plans to locate digging location, preparing excavations by hand or use of mechanical equipment, laying and repairing service pipes or systems and making connections to the water network. Repairing excations and pavements on completion of work. |
| Wastewater Operative | Conduct operational activities on the sewerage network, support the maintenance of public health and support appropriate risk assessments. |



Qualifications

Competence qualifications available to this pathway

| C 1 | C1 - CABWI Level 2 Diploma In Distribution Control (QCF) | | | | | |
|------------|--|-----------------------|-----------------|-----------------------------|-------------------------|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | |
| C1a | 600/2036/2 | CABWI | 38 | 262-280 | N/A | |

| C2 | - CABWI Leve | l 2 Certificate In Leakage Detection (QCF) | | | |
|-----|--------------|--|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C2a | 600/1987/6 | CABWI | 23 | 123 | N/A |

$\mbox{C3}$ - Level 2 Certificate In Network Construction Operations (Water) - Service Layer (QCF)

| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
|-----|------------|-----------------------|-----------------|-----------------------------|-------------------------|
| C3a | 600/2045/3 | CABWI | 32 | 228-253 | N/A |
| C3b | 600/1828/8 | Edexcel | 32 | 198-223 | N/A |
| C3c | 600/2669/8 | City & Guilds | 32 | 198-223 | N/A |

Competence qualifications available to this pathway (cont.)

C4 - Level 2 Diploma In Network Construction Operations (Water) - Main Layer (QCF)

| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
|-----|------------|-----------------------|-----------------|-----------------------------|-------------------------|
| C4a | 600/2044/1 | CABWI | 37 | 273-298 | N/A |
| C4b | 600/1820/3 | Edexcel | 37 | 223-248 | N/A |
| C4c | 600/2670/4 | City & Guilds | 37 | 223-248 | N/A |

C5 - Level 2 Diploma In Network Construction Operations (Water) - Repair and Maintenance (QCF)

| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
|-----|------------|-----------------------|-----------------|-----------------------------|-------------------------|
| C5a | 600/2043/X | CABWI | 43 | 308 | N/A |
| C5b | 600/1814/8 | Edexcel | 43 | 268 | N/A |
| C5c | 600/2668/6 | City & Guilds | 43 | 268 | N/A |

C6 - CABWI Level 2 Extended Diploma in Operating Process Plant (Ground Water Treatment)

| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | points value |
|-----|------------|-----------------------|-----------------|-----------------------------|--------------|
| C6a | 600/4972/8 | CABWI | 52 | 262-307 | N/A |

Competence qualifications available to this pathway (cont.)

| C7 - | C7 - CABWI Level 2 Diploma in Operating Process Plant (Ground Water Treatment) (QCF) | | | | |
|------|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C7a | 600/4917/0 | CABWI | 42 | 212-227 | N/A |

| C8 | C8 - CABWI Level 2 Diploma in Operating Process Plant (Surface Water Treatment) (QCF) | | | | |
|-----|---|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C8a | 600/4923/6 | CABWI | 65 | 312-327 | N/A |

| | C9 - CABWI Level 2 Extended Diploma in Operating Process Plant (Surface Water Treatment) | | | | |
|-----|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C9a | 600/4925/x | CABWI | 69 | 337-362 | N/A |

| C10 | C10 - CABWI Level 2 Diploma in Operating Process Plant (Waste Water Treatment) (QCF) | | | | |
|------|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C10a | 600/4926/1 | CABWI | 58 | 279-304 | N/A |

C11a 600/4927/3

Competence qualifications available to this pathway (cont.)

| | - CABWI Leve atment) | el 2 Extended Diploma in Operating | Process Plant (Wast | e Water | |
|-----|-------------------------|------------------------------------|---------------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| | | | | | |

74

351-389

N/A

| C12 | C12 - CABWI Level 2 Diploma in Operating Process Plant (Sludge Treatment) (QCF) | | | | |
|------|---|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C12a | 600/4928/5 | CABWI | 46 | 224-254 | N/A |

Knowledge qualifications available to this pathway

CABWI

| K1 | K1 - CABWI Level 2 Diploma In Water Engineering (Water Operations) (QCF) | | | | |
|-----|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K1a | 600/2047/7 | CABWI | 43 | 320 | N/A |

| K2 - CABWI Level 2 Diploma In Water Engineering (Network Construction Operations) (QCF) | | | | | |
|---|------------|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K2a | 600/2048/9 | CABWI | 41 | 410 | N/A |

Knowledge qualifications available to this pathway (cont.)

| K3 - | K3 - CABWI Level 2 Diploma in Water Engineering (Wastewater Operations) | | | | |
|------|---|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K3a | 600/2049/0 | CABWI | 43 | 359 | N/A |

| K4 | K4 - CABWI Level 2 Diploma in Water Engineering (Water Supply) (QCF) | | | | | |
|-----|--|-----------------------|-----------------|-----------------------------|-------------------------|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | |
| K4a | 601/3570/0 | CABWI | 37 | 218-251 | N/A | |

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

Apprentices must complete the qualifications that align to the job role they are employed in.

Competence

C1 must be taken by apprentices employed in a Water Distribution Operative role
C2 must be taken by apprentices employed in a Leakage Operative role
C3 or C5 must be taken by apprentices employed in a Water Servicelayer role
C4 or C5 must be taken by apprentices employed in a Water Mainlayer role
One of C6, C7, C8, C9, C10, C11 or C12 must be taken by apprentices employed in a Process
Operator role. The exact nature of the role will determine which of C6-C12 is most appropriate.

Knowledge

K1 provides underpinning knowledge and understanding for C6, C7, C8 & C9.

K2 provides underpinning knowledge and understanding for C3, C4 & C5.

K3 provides underpinning knowledge and understanding for C10, C11 & C12.

K4 provides underpinning knowledge and understanding for C1 and C2

Learners who have already achieved competence and/or knowledge qualifications before entry to the Apprenticeship must select options which will equip them with new skills and learning.

Essential Skills Wales - IT

Occupationally specific IT skills are important for Apprentices in these job roles and as such these skills are delivered through the competence qualification.

The IT skills delivered through Essential Skills Wales are not essential to effective performance in the job role and therefore the Functional Skills qualification in IT is not a mandatory requirement of this Apprenticeship.

Transferable skills (Wales)

| Essential skills (Wales) | | | | | | |
|--------------------------|----------------|----------------|--|--|--|--|
| | Minimum level | Credit value | | | | |
| Communication | 1 | 6 | | | | |
| Application of numbers | 1 | 6 | | | | |
| IT | Not applicable | Not applicable | | | | |

Progression routes into and from this pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- Work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as the Welsh Baccalaureate
- Achievement of Essential Skills Wales
- Successful completion of a Young Apprenticeship

Individuals must meet the entry conditions (see entry conditions) of the Foundation Apprenticeship and the recruiting employer.

Existing members of the workforce may also progress into this Foundation Apprenticeship.

Progression routes out of the pathway:

The Apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Foundation Apprenticeship.

Throughout any career in the water industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Foundation Apprenticeship under normal circumstances graduate Apprentices may continue to work as a competent operative in their current job role.

... The Water Industry (Wales) level 2 Pathway 1

Completion of the Foundation Apprenticeship supports progression onto the Apprenticeship in the Water Industry. Apprentices can also progress horizontally within the industry to complete competence qualifications at the same level or complete components of the Apprenticeship such as level 3 competence units relevant to the job role.

For the right individual, this Foundation Apprenticeship can provide a springboard to an exciting career in the water industry.

For further information on careers in the water industry please visit www.euskills.co.uk/careers



Employee rights and responsibilities

Within this Intermediate Level Apprenticeship the nine national outcomes/standards for ERR are met through a unit included in the knowledge qualifications.

Unit title - Understanding Employment Rights and Responsibilities in the Energy & Utility Sector

Awarding Organisation - CABWI Reference Number - H/503/1468 GLH - 20 Credits - 2

A copy of the certificate of achievement of the knowledge qualification must be provided when applying for an Apprenticeship completion certificate.

EU Skills has developed an ERR workbook to support delivery of this unit. Use of this workbook is optional and completion of the workbook does not need to be evidenced at the point of certification. The workbook can be downloaded from EU Skills website: www.euskills.co.uk

The ERR unit in the CABWI Level 2 Diploma in Water Engineering (Water Supply) is not mandatory. Apprentices taking this knowledge qualification must either take the optional ERR unit or complete the ERR workbook to meet the ERR requirements. To evidence completion of ERR at the point of certification, apprentices must either submit the ERR workbook sign off sheet or a breakdown of the units completed in the knowledge qualification.

Level 2, Pathway 2: Sewerage Operations and Maintenance

Description of this pathway

The Foundation Apprenticeship in Sewerage Operations and Maintenance requires a minimum total of 49 credits to be achieved. These are broken down as follows:

37 combined qualification (of which 13 are knowledge)

12 for ESW in Communication and Application of Number

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) |
|---|--|
| Sewerage Water Jetting Operative | Restore sewers and ancillaries to an appropriate condition using water jetting equipment. |
| Sewerage Investigative (CCTV) Operative | Monitor sewers and ancillaries using CCTV equipment. |
| Sewer Network Repair and Maintenance Operative | Carry out inspection and remedial repair and maintenance of sewers and ancillaries. |
| Sewerage Trenchless Technology Operative | Restore sewers and ancillaries to an appropriate condition using trenchless technology techniques. |

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A



Combined qualifications available to this pathway

| B1 - | B1 - CABWI Level 2 Diploma in Sewerage and Drainage Operations | | | | |
|------|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| B1a | 601/1489/7 | CABWI | 37-45 | 202-255 | N/A |

Relationship between competence and knowledge qualifications

Qualification B1a provides the knowledge and skills required for job competence for apprentices following the Foundation Apprenticeship in Sewerage Operations and Maintenance.

Job roles for this qualification are:

- Sewerage Jetting Operative
- Sewerage Investigative (CCTV) Operative
- Sewerage Manual Pipe Layer Operative (repair and maintenance)
- Sewerage Trenchless Technology Operative

Within the qualification B!a are three pathways and apprentices must choose the units/pathway appropriate to their job role -

Apprentices working as Water Jetting Operatives must take Pathway 1

Apprentices working as Sewerage Investigative Operatives must take Pathway 2

Apprentices working as Sewerage Manual Pipe Layer Operatives (repair and maintenance) and Sewerage Trenchless Technology Operatives must take Pathway 3

This is an integrated qualification which combines the assessment of competence and technical knowledge elements to allow for flexibility for employers and apprentices.

There is one unit within the qualification which is a specific knowledge unit:

- Sewerage and Drainage Essential Knowledge (D/505/6501) 9 credits and the additional credits for knowledge are gained through the integrated assessment of competence and knowledge (a minimum of 4 additional credits for knowledge are contained within the

... The Water Industry (Wales) level 2 Pathway 2

mandatory units)

Essential Skills Wales - IT

Occupationally specific IT skills are important for Apprentices in these job roles and as such these skills are delivered through the competence qualification.

The IT skills delivered through Essential Skills Wales are not essential to effective performance in the job role and therefore the Functional Skills qualification in IT is not a mandatory requirement of this Apprenticeship.



Transferable skills (Wales)

| Essential skills (Wales) | | | | | | |
|--------------------------|----------------|----------------|--|--|--|--|
| | Minimum level | Credit value | | | | |
| Communication | 1 | 6 | | | | |
| Application of numbers | 1 | 6 | | | | |
| IT | Not applicable | Not applicable | | | | |

Progression routes into and from this pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- · Work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as the Welsh Baccalaureate
- Achievement of Essential Skills Wales
- Successful completion of a (14-19) Diploma in particular the Diploma in Environmental and Land-Based Studies.
- Individuals must meet the entry conditions (see entry conditions) of the Foundation Apprenticeship and the recruiting employer.
- Existing members of the workforce may also progress into this Foundation Apprenticeship.

Progression routes out of the pathway:

The Apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Foundation Apprenticeship.

Throughout any career in the water industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Foundation Apprenticeship under normal circumstances Apprentices will continue to work as a competent operative in their current job role.

Completion of the Foundation Apprenticeship supports a range of horizontal and vertical progression oppportunities.

Apprentices can progress horizontally to other specialisms for example to water jetting or



... The Water Industry (Wales) level 2 Pathway 2

CCTV. Successful completion of the Foundation Apprenticeship facilitates progression onto the Apprenticeship in the Water Industry.

Apprentices can also progress vertically to Team Leader to Foreman to Junior Manager upwards. They could progress into sales (of company services), to in house trainers (of the qualifications they have achieved) or to health and safety inspection (of works conducted). Apprentices can also complete level 3 units relevant to their job role.

For the right individual, this Foundation Apprenticeship can provide a springboard to an exciting career in the water industry.

For further information on careers in the water industry please visit www.euskills.co.uk/careers



Employee rights and responsibilities

To ensure full coverage of the nine national outcomes/standards for Employee Rights and Responsibilities (ERR), an ERR workbook has been developed by EU Skills in partnership with Adams Associates. The workbook is not accredited, but records and formally assesses learning for ERR and must be completed by all apprentices as one of the mandatory outcomes of the Apprenticeship.

Assessment is conducted by the assessor who also assesses the apprentice's competence and knowledge qualifications. Quality assurance is achieved through existing centre Internal Verifier and External Verifier processes.

The knowledge in the workbook is intended to be covered throughout the Foundation Apprenticeship, therefore, whilst Induction is a critical way of meeting some of the ERR requirements; the workbook should be revisited throughout the Foundation Apprenticeship to embed learning.

Completion of the workbook is evidenced at the point of certification by upload of the workbook sign-off form to Apprenticeship Certificates England (ACE). This form must be completed by the apprentice and signed by the apprentice, the employer and the training provider in order to verify the knowledge has been gained by the apprentice throughout the Apprenticeship. An Apprenticeship completion certificate will not be issued without receipt of the ERR workbook sign off form.

The workbook can be downloaded from: www.euskills.co.uk

Level 3

Title for this framework at level 3

Apprenticeship in the Water Industry

Pathways for this framework at level 3

Pathway 1: The Water Industry

Level 3, Pathway 1: The Water Industry

Description of this pathway

The Apprenticeship in the Water Industry requires a minimum total of 123 credits to be achieved. These are broken down as follows:

34 for competence

71 for knowledge

18 for ESW

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

There are no entry requirements for this pathway in addition to the general framework entry requirements.

| Job title(s) | Job role(s) |
|---------------------------------------|---|
| Leakage Field Technician | Evaluate data to identify potential water leakage, determine leakage detection methods and techniques in response to water loss, programme, deploy and collect data from data-logging equipment and utilise and confirm performance of measuring equipment on the water distribution network. |
| Network Design Technician | Assess factors that impact on water network design, provide technical information for the design of water networks, produce detailed drawings to support water network activities and use technical information to review water network drawings. |
| Water Distribution Technician | Plan for operational activities on the water supply network; ensure the maintenance of water quality and continuation of supply and carry out appropriate risk assessments. |
| Water Fittings Inspector | Plan and schedule water regulations inspections, Inspect domestic and non-domestic premises for compliance with water fittings regulations, secure compliance with water fittings regulations and provide information for use in legal procedures. |
| Process Operations Technician | Maintain a safe working environment for treatment process operations, conduct health and safety risk assessments, monitor and maintain the quality of treatment processes, monitor and maintain treatment processing at optimum performance, organise and carry out the maintenance of process equipment. |
| Network Construction Technician | Conduct risk assessments and operational planning for network construction operations, locate and avoid supply apparatus and sub-structures, monitor signing, lighting, guarding and excavation of the highway, monitor and Implement water network construction operations. |
| Process Operations Supervisor | Maintain a safe working environment, conduct health and safety risk assessments, monitor and maintain the quality of treatment processes, monitor and maintain treatment processing at optimum performance, set objectives and provide support for team members, plan, allocate and monitor work of a team. |
| Wastewater Technician | Plan for operational activities on the sewerage network, ensure the maintenance of public health and carry out appropriate risk assessments. |

Qualifications

Competence qualifications available to this pathway

| C1 | C1 - CABWI Level 3 Certificate In Maintain Water Supply (Network) (QCF) | | | | | |
|-----|---|-----------------------|-----------------|-----------------------------|-------------------------|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | |
| C1a | 600/2037/4 | CABWI | 34 | 125-152 | N/A | |

| C2 | C2 - CABWI Level 3 Certificate In Water Fittings Regulations Enforcement (QCF) | | | | |
|-----|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C2a | 600/2031/3 | CABWI | 35 | 201-211 | N/A |

| C 3 | C3 - CABWI Level 3 Diploma In Controlling Process Operations (QCF) | | | | |
|------------|--|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C3a | 600/2035/0 | CABWI | 67 | 321 | N/A |

Competence qualifications available to this pathway (cont.)

| C4 - | C4 - CABWI Level 3 Diploma In Designing Water Networks (QCF) | | | | | |
|------|--|-----------------------|-----------------|-----------------------------|-------------------------|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | |
| C4a | 600/2038/6 | CABWI | 42 | 178 | N/A | |

| C 5 | - CABWI Leve | l 3 Diploma In Leakage Control (QCF) | | | |
|------------|--------------|--------------------------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C5a | 600/1988/8 | CABWI | 48 | 231-274 | N/A |

| Co | C6 - CABWI Level 3 Diploma in Managing and Controlling Process Operations (QCF) | | | | |
|-----|---|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C6a | 600/2034/9 | CABWI | 56 | 306 | N/A |

| C7 | C7 - CABWI Level 3 Diploma In Network Construction Operations (Water) (QCF) | | | | |
|-----|---|-----------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C7a | 600/2039/8 | CABWI | 53 | 200-223 | N/A |

Knowledge qualifications available to this pathway

| K1 - | - CABWI Level | 3 Diploma In Water Engineering (QCF) | | | |
|------|---------------|--------------------------------------|-----------------|-----------------------------|-------------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K1a | 600/2051/9 | CABWI | 71 | 610-640 | N/A |

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

Apprentices must complete the qualifications appropriate to their job role.

- C1 must be taken by apprentices employed as Water Distribution Technician
- C2 must be taken by apprentices employed as a Water Fittings Inspector
- C3 must be taken by apprentices employed as a Process Operations Technician or Wastewater Technician
- C4 must be taken by apprentices employed as a Network Design Technician
- C5 must be taken by apprentices employed as a Leakage Field Technician
- C6 must be taken by apprentices employed as a Process Operations Supervisor or Wastewater Technician
- C7 must be taken by apprentices employed as a Network Construction Technician
- K1 provides the underpinning knowledge and understanding for C1-C7.

Learners who have already achieved competence and/or knowledge qualifications before entry to the Apprenticeship must select options which will equip them with new skills and learning.

Transferable skills (Wales)

| Essential skills (Wales) | | | | | |
|--------------------------|---------------|--------------|--|--|--|
| | Minimum level | Credit value | | | |
| Communication | 2 | 6 | | | |
| Application of numbers | 2 | 6 | | | |
| IT | 2 | 6 | | | |

Progression routes into and from this pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- Foundation Apprenticeship in the Water Industry
- Work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as the Welsh Baccalaureate Intermediate Diploma
- Achievement of Essential Skills Wales
- Successful completion of a Young Apprenticeship

Individuals must meet the entry conditions (see entry conditions) of the Apprenticeship and the recruiting employer.

Existing members of the workforce may also progress into this Apprenticeship.

Progression routes out of the pathway:

The Apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Apprenticeship.

Throughout any career in the water industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Apprenticeship and under normal circumstances graduate Apprentices may continue to work as a competent operative in their current job role.

Progression will depend on the performance and motivation of the individual and the vacancies/opportunities available within the company. It is possible for supervisors to move

across to other industry areas or to become the managers of the future. For these individuals, opportunities to achieve further qualifications, which might include a level 4 competence based qualification, will be available. The Higher Level Apprenticeship in Utilities Network Planning and Management Industry provides a progression pathway for Apprentices that successfully complete the Apprenticeship.

Graduate Apprentices could progress to complete one or more of the following qualifications:

- Higher National Certificate (HNC) in Water Operations delivered by Cardonald College by distance learning and Watertrain.
- Higher National Certificate (HNC) in Civil Engineering delivered widely across the UK
- Level 4 Diploma in Utilities Network Planning and Management delivered by Watertrain.

Apprentices can work towards membership of the Institute of Water which is licensed to register members on the register of engineers and technicians maintained by the Engineering Council. The Institute is also licensed by the Society for the Environment to award Chartered Environmentalist (CEnv) which demonstrates professionalism in sustainable environmental management and development.

For the right individual, this programme can provide a springboard to an exciting career in the water industry.

For further information on careers in the water industry please visit www.euskills.co.uk/care

UCAS points for this pathway: Not applicable.

Employee rights and responsibilities

Within this Apprenticeship the nine national outcomes/standards for ERR are met through a mandatory unit included in the knowledge qualifications.

Unit title - Understanding Employment Rights and Responsibilities in the Energy & Utility Sector Awarding Organisation - CABWI

Reference Number - H/503/1468

GLH - 20

Credits - 2

A copy of the certificate of achievement of the knowledge qualification must be provided when applying for an Apprenticeship completion certificate.

EU Skills has developed an ERR workbook to support delivery of this unit. Use of this workbook is optional and completion of the workbook does not need to be evidenced at the point of certification.

The workbook can be downloaded from EU Skills website: www.euskills.co.uk

Where the Apprentice has already completed this unit as part of the Foundation Apprenticeship it does not need to be repeated.

Level 4

Title for this framework at level 4

Utilities Network Planning and Management

Pathways for this framework at level 4

Pathway 1: Utilities Network Planning and Management

Level 4, Pathway 1: Utilities Network Planning and Management

Description of this pathway

This Higher Apprenticeship in Utilities Network Planning and Management requires a minimum of 153 credits to be achieved. These are broken down as follows:

47 - competence

88 - knowledge

18 - ESW

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) |
|---------------------------------------|--|
| Network Manager | Responsibility for the daily operations of the water or sewerage network. |
| Leakage Manager | Managing leakage control activities on the water distribution network. |
| Asset Engineer | Developing asset management strategies for the water industry for inclusion with capital development plans. |
| (Trainee) Network Modeller | Design of computer models that reflect the operation of water and sewerage networks for on-going operational management and future enhancements. |
| Design Technician/Project Engineer | Working with senior engineers on the design of assets in the water industry. |



Qualifications

Competence qualifications available to this pathway

| C 1 | C1 - CABWI Level 4 Diploma In Utilities Network Planning and Management (QCF) | | | | | |
|------------|---|-----------------------|-----------------|-----------------------------|-------------------------|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | |
| C1a | 600/8287/2 | CABWI | 47 | 235-289 | N/A | |

Knowledge qualifications available to this pathway

| K1 - | K1 - HNC Water Operations | | | | | | | |
|------|---------------------------|-----------------------|-----------------|-----------------------------|-------------------------|--|--|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | | | |
| K1a | G979 15 | SQA | 88 | 480 | N/A | | | |

| K2 - Edexcel BTEC Level 4 HNC Diploma in Construction and the Built Environment (QCF) | | | | | | | | |
|---|------------|-----------------------|-----------------|-----------------------------|-------------------------|--|--|--|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value | | | |
| K2a | 500/8276/0 | Edexcel | 120 | 500 | N/A | | | |

... The Water Industry (Wales) level 4 Pathway 1

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

C1 is appropriate for Apprentices employed in all of the job roles this Higher Apprenticeship was developed to underpinn. Employers can tailor the qualification directly to the Apprentices' job role through the mandatory units chosen.

K1 and K2 provide underpinning knowledge and understanding for C1.



Transferable skills (Wales)

| Essential skills (Wales) | | | | | | | | |
|--------------------------|---------------|--------------|--|--|--|--|--|--|
| | Minimum level | Credit value | | | | | | |
| Communication | 2 | 6 | | | | | | |
| Application of numbers | 2 | 6 | | | | | | |
| IT | 2 | 6 | | | | | | |

Progression routes into and from this pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- Apprenticeship in the Water Industry
- Work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as the Welsh Baccalaureate Intermediate Diploma
- Mature candidates currently employed by the but taking a career change

Individuals must meet the entry conditions (see entry conditions) of the Higher Apprenticeship and the recruiting employer. Existing members of the workforce may also progress into this Higher Apprenticeship as well as new recruits.

Progression routes out of the pathway:

The Apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Higher Apprenticeship.

Throughout any career in the water industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Higher Apprenticeship and under normal circumstances, graduate Apprentices may continue to work as a competent manager or engineer in their current job role. Progression will depend on the performance and motivation of the individual and the vacancies/opportunities available within the company. It is possible for Managers and/or Engineers to move across to other industry areas and progress both horizontally and vertically

... The Water Industry (Wales) level 4 Pathway 1

within the industry. For these individuals, opportunities to achieve further qualifications, which might include a level 4 competence based qualification, will be available.

Graduate Apprentices may progress onto a 1st Degree in Civil Engineering. Completion of the Apprenticeship is recognised by the Institute of Water for professional registration against Engineering Council parameters.

For the right individual, this programme can provide a springboard to an exciting and rewarding career in the water industry.

For further information on careers in the water industry please visit www.euskills.co.uk/careers

UCAS points for this pathway: Not applicable



Employee rights and responsibilities

To ensure full coverage of the nine national outcomes/standards for Employee Rights and Responsibilities(ERR) an ERR workbook has been developed by EU Skills. The workbook is not accredited, but records and formally assesses learning for ERR and must be completed by all apprentices as one of the mandatory outcomes of the Apprenticeship.

Assessment is conducted by the assessor who also assesses the Apprentice's competence and knowledge qualifications. Quality assurance is achieved through existing centre Internal Verifier and External Verifier processes.

The knowledge in the workbook is intended to be covered throughout the Apprenticeship, therefore, whilst Induction is a critical way of meeting some of the ERR requirements; the workbook should be revisited throughout the Apprenticeship to embed learning.

Completion of the workbook is evidenced at the certification stage by submission of the workbook sign-off form. This form must be completed by the Apprentice and signed by the Apprentice, the employer and the training provider in order to verify the knowledge has been gained by the Apprentice throughout the Apprenticeship. An Apprenticeship completion certificate will not be issued without receipt of the ERR workbook sign off form.

The workbook can be downloaded from EU Skills website: www.euskills.co.uk

Where the Apprentice has already completed this workbook, or the QCF unit titled Employment Rights and Responsibilities in the Energy & Utility Sector, as part of the Apprenticeship or Intermediate Apprenticeship it does not need to be repeated.



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

How equality and diversity will be met

Under-representation

The under-representation of women and those from a black or minority ethnic (BME) background remains a key priority for the industry. Females constitute only 28% of the workforce compared to the 43% UK average. In addition, only 4% of the water industry workforce is from a black or minority ethnic (BME) background compared to 8% of the UK workforce.

Barriers to entry and progression

Unfounded but widespread perceptions about the water industry provide the main barrier to entry and progression for these under-represented groups.

Solutions to entry and progression

Apprenticeships are seen as a vital route to encourage and facilitate a greater diversity of individuals into the industry. This Apprenticeship does not discriminate. Employers/providers must be able to demonstrate that there are no overt or covert discriminatory practices in selection and employment. All promotional, selection and training activities must comply with relevant legislation, in particular, the protected characteristics of the Equality Act 2010. For guidance please refer to:

www.equalityhumanrights.com/advice-and-guidance/new-equality-act-guidance/

Equal opportunities policies and procedures will contribute to the Employee Rights and Responsibilities component of this Apprenticeship. It is recommended that employers/providers conduct an exit interview if the Apprentice leaves the Apprenticeship before completion.

The larger employers in the industry are actively involved in initiatives to increase representation of women and BME groups in the industry. Energy & Utility Skills will support these initiatives by promoting specifically to these groups. Take up will be monitored through analysis of statistical returns from the Welsh Government and through certification data.

EU Skills will continue to host stands at careers fairs and participate in skills competitions where we can promote this Apprenticeship to all groups including females and BME. In addition we have developed a number of case studies of successful women working in the sector which we are using to encourage new female entrants.

These case studies can be accessed at: http://www.euskills.co.uk/careers/



On and off the job training (Wales)

Summary of on- and off-the-job training

Training hours attached to the Apprenticeship refers to the time taken by the apprentice to develop the practical skills and underpinning knowledge to demonstrate competence in their job role.

Training hours are delivered during contracted working hours under an Apprenticeship Agreement, or during a qualifying period ending on the date of application for a certificate (5 years is recommended, but a shorter/longer timescale can be set).

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;
- are delivered through one or more of the following methods: individual and group teaching, e-learning, distance learning, coaching, mentoring: feedback and assessment; collaborative/networked learning with peers; guided study

The industry would expect the Foundation Apprenticeship in the Water Industry to take between 16 and 18 months to complete. Where this is the case a minimum of 496 training hours must be completed over the duration of the Apprenticeship.

The industry would expect the Foundation Apprenticeship in Sewerage Operations and Maintenance to take a minimum of 24 months to complete. Where this is the case a minimum of 313 training hours must be completed over the duration of the Apprenticeship.

The industry would expect the Apprenticeship to take between 20 and 24 months to complete. Where this is the case a minimum of 911 training hours must be completed over the duration of the Apprenticeship.

The industry would expect the Higher Apprenticeship to take 24 months to complete. Where this is the case a minimum of 927 training hours must be completed over the duration of the Apprenticeship.

Off-the-job training

Off the job training hours are the hours associated with learning that takes place "away from

the immediate pressures of the job" for example, in a training room on the employers' premises.

Over the duration of the Foundation Apprenticeship in the Water Industry a minimum of 373 training hours must be completed off the job. It is anticipated that these training hours will be broken down as follows:

- 14 induction
- 218 knowledge qualification
- 45 level 1 Essential Skills Wales in Application of Number
- 45 level 1 Essential Skills Wales in Communications
- 5 progress reviews (at least one hour every 12 weeks for the duration of the programme)
- 30 coaching
- 16 mentoring (at least one hour every month for the duration of the programme)

Over the duration of the Foundation Apprenticeship in Sewerage Operations and Maintenance, a minimum of 196 training hours must be completed off the job. It is anticipated that these training hours will be broken down as follows:

- 14 induction
- 60 knowledge in the combined qualification
- 45 level 2 Essential Skills Wales in Application of Number
- 45 level 2 Essential Skills Wales in Communication
- 8 progress reviews (at least one hour every 12 weeks for the duration of the programme)
- 24 mentoring (at least one hour every month for the duration of the programme)

Over the duration of the Apprenticeship, a minimum of 786 training hours must be completed off the job. It is anticipated that these training hours will be broken down as follows:

- 14 induction
- 610 knowledge qualification
- 45 level 2 Essential Skills Wales in Application of Number
- 45 level 2 Essential Skills Wales in Communication
- 45 level 2 Essential Skills Wales in Imformation Communication Technology
- 7 progress reviews (at least one hour every 12 weeks for the duration of the programme)
- 20 GLH mentoring (at least one hour every month for the duration of the programme)

Over the duration of the Higher Apprenticeship a minimum of 691 training hours must be completed off the job. It is anticipated that these training hours will be broken down as follows:

- 14 induction
- 480 knowledge qualification
- 45 Level 2 Essential Skills Wales in Maths

- 45 Level 2 Essential Skills Wales in English
- 45 Level 2 Essential Skills Wales in ICT
- 30 related to completion of the Employment Rights and Responsibilities (ERR) workbook
- 8 progress reviews (at least one hour every 12 weeks for the duration of the programme)
- 24 mentoring (or at least one hour every month for the duration of the programme)

How this requirement will be met

Delivery and recording of off the job training hours:

Off the job training hours are the hours associated with learning that takes place "away from the immediate pressures of the job" for example, in a training room on the employers' premises.

Off-the-job training hours will be delivered through the knowledge qualification, the knowledge element of the combined qualification, ESW, ERR, progress reviews, mentoring and coaching. This could include training hours delivered through access to a computer through working hours, day release, block release etc.

EU Skills recommends that a plan is developed at the outset of the Apprenticeship to determine how the training hours requirement will be met. Training hours should be recorded by the apprentice; for example through a diary or portfolio.

Evidence of completion of the total off the job training hours:

Off-the-job training hours will be evidenced through:

- Certificate of achievement for the relevant knowledge or combined qualification
- Certificate of achievement for ESW
- Completed ERR workbook sign off sheet (where appropriate)

This evidence must be submitted in order to apply for an Apprenticeship completion certificate. In addition, when claiming an Apprenticeship completion certificate, providers will be required to submit an Apprentice Declaration and Authorisation form to EU Skills via Apprenticeship Certification Wales (ACW - http://acwcerts.co.uk/). As part of this form, Apprentices and the claimant of their completion certificate must sign to declare that the apprentice has received the required minimum levels of training hours as set out in this framework. This form can be downloaded from http://acwcerts.co.uk/

Training hours must be recorded by the apprentice, for example through a log, diary or portfolio.

On-the-job training

On the job learning hours refer to the time taken to develop the practical skills applied in the

context of the apprentices' day to day job role. It can be seen as the time the apprentice spends undertaking activities that are routine for their job role and that provide the opportunity to learn, develop and practice skills.

The minimum on the job learning hours are:

Foundation Apprenticeship in the Water Industry: 123 learning hours

Foundation Apprenticeship in Sewerage Operations and Maintenance: 117 learning hours

Apprenticeship: 125 learning hours

Higher Apprenticeship: 235 learning hours

How this requirement will be met

On-the-job training hours will be delivered and evidenced through successful completion (demonstrated through a certificate of achievement) of the relevant competence qualification or competence element of a combined qualification.

This evidence must be submitted in order to apply for an Apprenticeship completion certificate. In addition, when claiming an Apprenticeship completion certificate, providers will be required to submit an Apprentice Declaration and Authorisation form to EU Skills via Apprenticeship Certification Wales (ACW - http://acwcerts.co.uk/). As part of this form, Apprentices and the claimant of their completion certificate must sign to declare that the apprentice has received the required minimum levels of training hours as set out in this framework. This form can be downloaded from http://acwcerts.co.uk/

Training hours must be recorded by the apprentice, for example through a log, diary or portfolio.

Wider key skills assessment and recognition (Wales)

Improving own learning and performance

This is not a mandatory outcome of the framework because these skills are not essential for effective performance in the job role; however, Apprentices, especially those following the Higher Apprenticeship, are encouraged to complete this wider key skill where they are able to. Providers should support Apprentices that wish to do so.

Working with others

This is not a mandatory outcome of the framework because these skills are not essential for effective performance in the job role; however, Apprentices, especially those following the Higher Apprenticeship, are encouraged to complete this wider key skill where they are able to. Providers should support Apprentices that wish to do so.

Problem solving

This is not a mandatory outcome of the framework because these skills are not essential for effective performance in the job role; however, Apprentices, especially those following the Higher Apprenticeship, are encouraged to complete this wider key skill where they are able to. Providers should support Apprentices that wish to do so.



Additional employer requirements

There are no additional employer requirements.



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