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# **MODERN APPRENTICESHIP**

IN

The Water Industry at SCQF Level 6

FRAMEWORK DOCUMENT
FOR
SCOTLAND

**Energy & Utility Skills** 

March 2020

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# **Contents**

Modern Apprenticeships in Scotland	3
Modern Apprenticeships in the Water Industry at SCQF Level 6	4
Summary of Framework	5
The Framework	7
Registration and certification	9
Recruitment and selection	9
Equal opportunities	10
Health and safety	11
Contracts	11
Employment status of Modern Apprentices	11
Terms and conditions of employment	11
Training and development	11
Consultation	14
Career progression	14

# **Appendices**

Appendix 1	Stakeholder Responsibilities	16
Appendix 2	Modern Apprenticeship Centres (MACs)	19
Appendix 3	Training Agreement and Training Plan	20

# **Modern Apprenticeships in Scotland**

#### What are Modern Apprenticeships?

Modern Apprenticeships offer those aged over 16 paid employment combined with the opportunity to train for jobs at craft, technician and management level.

#### Who develops them?

Modern Apprenticeships are developed by Sector Skills Councils (SSCs). SSCs consult with employers and key partners in their sector to produce a training programme, which meets the needs of employers.

#### Who are they for?

Modern Apprenticeships are available to employees aged 16 or over. Employees need to demonstrate to their employer that they have the potential to complete the programme. All Modern Apprentices must have a demonstrable need to acquire significant new knowledge and skills to fulfil their job role. The modern apprenticeship framework selected for the employee must be the most appropriate learning programme generally available to that individual, providing such knowledge and skills.

#### What's in a Modern Apprenticeship?

In Scotland, there are more than 70 different Modern Apprenticeship Frameworks and they are all designed to deliver a training package around a minimum standard of competence defined by employers through SSCs. There are four different levels of Apprenticeship in Scotland: SCQF 5 (SVQ 2), SCQF 6/7 (SVQ 3), SCQF 8/9 (SVQ 4) and SCQF 10 (SVQ 5). They all contain the same 3 basic criteria:

- A relevant SVQ (or alternative competency-based qualifications)
- Core Skills
- Industry specific training

Details of the content of this specific Modern Apprenticeship are given in the next section.

# Modern Apprenticeships in the Water Industry at SCQF Level 6

#### The Industry

The water industry plays a vital role in protecting the public health of Scotland by providing safe, high quality drinking water supplies to customers (households and businesses) up to and including the internal stop valve on the customers' property. The industry also includes sewerage system networks which collect the sewerage, surface water and trade effluent that flows from our homes and industries is drained and transported to wastewater treatment works so that it is dealt with appropriately and in an efficient and environmentally sustainable way. In Scotland public drinking water and sewerage services are provided by Scottish Water to about 5 million customers in over 2.3 million households.

#### **The Strategic and Policy Context**

The water industry contributes to the Scottish Government's strategic objectives as outlined in the Government's Economic Strategy, 2015<sup>1</sup>. In particular, it contributes to a wealthier and fairer Scotland through the National Outcome of providing public services that are, "high quality, continually improving, efficient and responsive to local needs". Scottish Water is towards the end of a six-year strategic plan, 'Always Serving Scotland', Scottish Water Business Plan 2015-2021<sup>2</sup>, which is focused on investing £170m on infrastructure and in innovative and productive processes. This investment is intended to improve water quality and extract value from waste, enhancing the customer experience and ultimately reduce the cost.

#### **Contribution to economy**

In terms of the impact of the water industry in Scotland, a report on The Water Sector in Scotland – Market Size Research: Turnover, Jobs, Exports and Gross Value Added, 2019 shows the impact of the industry in Scotland. It employs 16,600 direct full-time equivalent jobs, has a turnover of £3.7 billion, has exports of £170 million and generates £1.7 billion of Gross Value Added (GVA) for the Scotlish economy. The report identified 412 companies selling water related products and services with a base in Scotland.

According to the Energy and Utilities Workforce Renewal and Skills Strategy: 2020<sup>3</sup>, once the supply chain is taken into consideration, almost 200,000 people are currently employed in water and wastewater related jobs in the UK.

The water industry generates more GVA per job than the overall Scottish economy. As one of the most productive UK industries, it is important that there is a sufficiently skilled workforce in this area to continue to make a significant impact on national GDP and ensure compliance with legislation.

Page 4

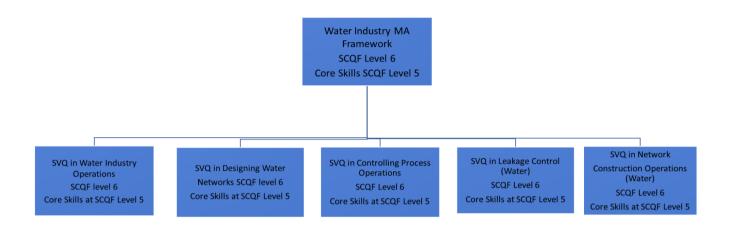
<sup>1</sup> https://www.gov.scot/publications/scotlands-economic-strategy/

https://www.scottishwater.co.uk/en/Help-and-Resources/Document-Hub/Key-Publications/www.scottishwater.co.uk/-/media/ScottishWater/Document-Hub/Key-Publications/Delivery-and-Business-Plans/040419SWBusinessPlan2015to21Appendices.pdf

<sup>3</sup> http://www.legislation.gov.uk/asp/2013/5/enacted/data.pdf

# **Summary of Framework**

Diagram showing the contents of the Modern Apprenticeship in The Water Industry at SCQF Level 6:



#### **Duration**

Industry has agreed that the Water MA at SCQF 6 framework duration is on average 24 months for all of the routes. Some learners could take slightly less than 24 months and others may take more depending on their prior knowledge and learning speed.

#### **Mandatory outcomes**

#### SVQ or alternative competency-based qualification

- The following must be achieved:
  - SVQ in Water Industry Operations at SCQF level 6 (GP9W 23), min 50 max 65 credits; or
  - SVQ in Designing Water Networks at SCQF level 6 (GR6Y 23) min 42 credits; or
  - SVQ in Controlling Process Operations at SCQF level 6 (GR6X 23), min 60 and max 65 credits; or
  - SVQ in Leakage Control (Water) at SCQF level 6 (GR70 23), min 48 max 49 credits; or
  - SVQ in Network Construction Operations (Water) at SCQF level 6 (GR71 23), min 65 max 73 credits.

## **Core Skills**

•	Communication	SCQF Level 5	6 Credit points
•	Working With Others	SCQF Level 5	6 Credit points
•	Problem Solving	SCQF Level 5	6 Credit points
•	Information Technology	SCQF Level 5	6 Credit points
•	Numeracy	SCQF Level 5	6 Credit points

All core skills should be separately certificated.

Enhancements	
None.	

## **Optional Outcomes**

#### Additional SVQ Units/Qualifications/Training

- HNC Water Operations at SCQF level 7 (GJ90 15)
- PDA Water Operations: Drinking Water Process at SCQF level 7 (G9PC47)
- PDA Water Operations: Waste Water Process at SCQF level 7 (G9P947)
- PDA Water Operations: Water Distribution and Water Utilisation at SCQF level 7 (G9PA47)
- First Aid at Work at SCQF level 6
- Emergency First Aid at Work at SCQF level 6
- RQF Level 2 Award in working in low risk confined spaces (GK6162)
- RQF Level 2 Award in working in medium risk confined spaces (GK6262)
- RQF Level 2 Award in working in high risk confined spaces (GK6062)
- SCQF level 5 Award in manual handling principles and practice (R45004)
- Water Operations: Waste Water Treatment Processes (F53M)
- Water Operations: Materials and Components (F53L)
- Water Operations: Water Treatment Processes (F53T)
- Water Operations: Water Distribution (F53N)
- National Water Hygiene Course
- RQF Level 3 Coaching and Mentoring
- Project Fundamentals Qualification (PFQ)
- Managing Workplace projects
- Communicate with Customers in the Utilities Sector (J2TG04)
- Operate signing, lighting, guarding and control equipment on the highway for utilities network construction (J2PP 04)

#### The Framework

#### **Duration**

It is expected that apprentices following this framework will take on average 24 months to complete depending on experience.

## **Mandatory Outcomes**

### SVQ(s)/CBQs

Each apprentice is required to achieve one of the following Qualifications:

- SVQ in Water Industry Operations at SCQF level 6 (GP9W 23), min 50 max 65 credits; or
- SVQ in Designing Water Networks at SCQF level 6 (GR6Y 23) min 42 credits; or
- SVQ in Controlling Process Operations at SCQF level 6 (GR6X 23), min 60 and max 65 credits;

or

- SVQ in Leakage Control (Water) at SCQF level 6 (GR70 23), min 48 max 49 credits; or
- SVQ in Network Construction Operations (Water) at SCQF level 6 (GR71 23), min 65 max 73 credits.

All Scottish Modern Apprenticeships must contain a relevant Scottish Vocational Qualifications (SVQs) or Competency Based Qualifications (CBQs). SVQs and CBQs are work-based qualifications based on National Occupational Standards of competence drawn up by representatives from each industry. They are made up of units – normally between six and ten – which break a job down into separate functions reflecting the different kind of activities of a job. SVQs and CBQs are available at a range of levels – although most are at SCQF Levels 5, 6 and 7 (SVQ Level 2 and 3). When someone has achieved an SVQ or CBQ, there is a guarantee that they have the skills and knowledge needed to do their job.

#### **Core Skills**

Each apprentice is required to achieve the following core skills:

Communication	SCQF Level 5, 6 credit points
Working with others	SCQF Level 5, 6 credit points
Problem Solving	SCQF Level 5, 6 credit points
Information and Communication Technology	SCQF Level 5, 6 credit points
Numeracy	SCQF Level 5, 6 credit points

Core Skills are separately certificated.

Core Skills are skills and abilities which everyone needs in their work. This is true for every job in every workplace. Core Skills also feature in National Qualifications such as National 4 and 5s and Highers and from 2000, Scottish candidates have been issued with a Core Skills profile on their Scottish Qualifications Certificate. Candidates who have already been certificated as achieving Core Skills at the levels given above — either in the workplace or at school or college - do not need to repeat these Core Skills as part of the Modern Apprenticeship Framework.

#### **Enhancements**

None.

## **Optional Outcomes**

Some employers may find it useful to provide additional training in the following areas:

- HNC Water Operations at SCQF Level 7 (GJ90 15)
- PDA Water Operations: Drinking Water Process at SCQF Level 7 (G9PC47)
- PDA Water Operations: Waste Water Process at SCQF Level 7 (G9P947)
- PDA Water Operations: Water Distribution and Water Utilisation at SCQF Level 7 (G9PA47)
- First Aid at Work at SCQF level 6 (GN0V 46)
- Emergency First Aid at Work at SCQF level 6 (
- RQF Level 2 Award in working in low risk confined spaces (GK6162)
- RQF Level 2 Award in working in medium risk confined spaces (GK6262)
- RQF Level 2 Award in working in high risk confined spaces (GK6062)
- SCQF Level 5 Award in manual handling principles and practice (R45004)
- Water Operations: Waste Water Treatment Processes (F53M) this is a Unit in the HNC Water Operations at SCQF Level 7
- Water Operations: Materials and Components (F53L)
- Water Operations: Water Treatment Processes (F53T)
- Water Operations: Water Distribution (F53N)
- National Water Hygiene Course
- RQF Level 3 Coaching and Mentoring
- Project Fundamentals Qualification (PFQ)
- Managing Workplace projects
- Communicate with Customers in the Utilities Sector (J2TG 04) this is an Optional Unit in some of the MAF Core SVQs and Diplomas
- Operate Signing, Lighting, Guarding and Control Equipment on the Highway for Utilities Network Construction (J2PP 04) this is an Optional Unit in the Diploma in Sewerage and Drainage Operations at SCQF Level 5.

#### Supplementary Information:

The Safety, Health and Environmental Awareness (SHEA) course for the water industry covers basic health, safety and environmental law as well as best practice when on sites. As well as a common core of units (shared with other Utility industry SHEA courses), it contains additional industry specific units. Energy and Utility Skills Register (EUSR) SHEA registration allows access to CSCS controlled sites for utilities work.

The National Water Hygiene course is designed for those who work in the water industry and provides learners with a basic understanding of how to maintain good hygiene standards when working with potable water. It covers topics such as health and hygiene awareness and contamination risks when working on clean water sites such as water treatment works or transient works on the water network. On completion of the course, learners are registered on EUSR and issued with an EUSR registration card, often referred to as 'the Blue Card'.

The Water Industry Registration Scheme (WIRS) is administered by Lloyds on behalf of water companies and is for contractors who provide new connections to the existing water supply or sewerage system. Learners are assessed in several areas, including design, construction, connections, commissioning and project management. By becoming WIRS accredited, companies don't need to be approved by 22 separate water companies.

The Level 3 Coaching and Mentoring qualification (awarded by the Institute of Leadership and Management) is designed for people in their first management roles – including team leaders and first-line managers. Learners are provided with the tools and confidence to coach people as part of their normal working role.

The Project Fundamentals Qualification (awarded by the Association of Project Management) is a qualification that is designed for those embarking on a project management career or for individuals who require wish to gain general project management knowledge and awareness. The course covers a wide range of topics at a summary level thus providing attendees with a broad understanding of project management terminology, basic techniques and the people skills required to successfully manage a project.

The Managing Workplace Projects Unit (awarded by the Institute of Leadership and Management) equips learners with the knowledge and understanding of managing workplace projects. The task requires them to manage a simple workplace project, ideally one that they are currently working on, and to use this to understand the costs and benefits resulting from the project.

# **Registration and certification**

This Scottish Modern Apprenticeship is managed by Energy & Utility Skills. The SSC is the first point of contact in Scotland for any enquiries in relation to the Framework. Contact details:

Registrations Team Energy & Utility Skills Limited Friars Gate 1011 Stratford Road Shirley Solihull B90 4BN

Tel: 0845 077 9922

Email: certifications@euskills.co.uk

Energy & Utility Skills will register all Scottish Modern Apprentices undertaking this Framework. All Modern Apprentices must be registered within 4 weeks of starting their apprenticeship. In order to register apprentices, centres must register via MA Online: https://modernapprenticeships.org/web/

In the case of MAs which receive funding it is acceptable for the Skills Development Scotland Training Plan to be used on the condition that it includes all relevant information as set out in the MA Training Plan.

Energy & Utility Skills Ltd will issue a Modern Apprenticeship Certificate of Completion to those Modern Apprentices who have completed the mandatory outcomes of the Framework. Before a certificate is issued, training providers must submit evidence to Energy & Utility Skills that the mandatory outcomes have been achieved. This will normally be in the form of photocopies of certificates from awarding bodies uploaded via MA Online.

Requests for registration and certification should be made to the SSC at the address above.

#### SSC Service level

Energy & Utility Skills undertakes to confirm the registration of candidates in writing within 4 weeks of receipt of the relevant Training Plan and Training Agreement. Each candidate will be issued with a unique registration number.

Energy & Utility Skills also undertakes to issue Certificates of Completion within 10 working days of receipt of the appropriate evidence that a candidate has completed the outcomes as stated in the Training Plan.

#### Recruitment and selection

The recruitment and selection of Modern Apprentices is primarily the responsibility of the employer. However, the following guidance is given:

- Employees may enter a Modern Apprenticeship from the age of 16. There is no upper age limit.
- The Modern Apprenticeship is designed to attract high quality people to the industry. Achievement of academic
  qualifications is one way of assessing the suitability of applicants. However it should be stressed that no persons
  should be deterred from applying for a Modern Apprenticeship because of a lack of formal educational
  qualifications. As well as traditional qualifications such as Nationals and Highers, employers should also be aware

of newer vocational qualifications or vocational activity undertaken outwith an academic institution, such as volunteering activity.

- The following factors may also influence the selection process:
  - performance during a formal interview process
  - references
  - relevant work experience
  - trial observation period.
- Employers should be aware of the nature, relevance and quality of foreign qualifications and make appropriate allowances concerning entry requirements.
- In order to promote and maintain the high status of the Modern Apprenticeship within the industry all literature distributed for recruitment purposes should emphasise the high standards of achievement expected of the candidate.
- Employers may wish to contact the SSC for advice and guidance on recruitment and selection.

Most employers have their own recruitment and selection procedures. Many also work closely with their Training Provider Partners in the process when reviewing and selecting Modern Apprenticeship candidates. Many Group Training Associations have good integrated procedures supporting employers which work consistently well.

Whilst there are no specific sectorial requirements for entry on to this Modern Apprenticeship, individuals with the following characteristics and attributes are likely to be suitable for this Modern Apprenticeship:

- National level 4/5 OR equivalent
- Safety conscious and have a responsible attitude to work
- Enjoy working outdoors
- Have good practical skills for handling tools and instruments
- Motivation, flexibility and adaptable
- Excellent interpersonal skills and customer focus
- The ability to work as part of a team and independently
- Apprentices must have good self-discipline and timekeeping
- Apprentices need to be enthusiastic with a positive attitude and a keen interest in the water industry
- Good IT skills

N.B. 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 an EUSR 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.

# **Equal opportunities**

Modern Apprenticeships should ensure that there is equality of opportunity for all and any barriers (real or perceived) are addressed to support anyone seeking to enter employment to undertake the Modern Apprenticeship.

All MAs supported by Skills Development Scotland must conform to any contractual requirements on equal opportunities. All employers of Modern Apprentices should have an Equal Opportunities policy statement.

# **Health and Safety**

All aspects of health and safety at work must be recognised within the delivery of this Modern Apprenticeship Framework and all statutory requirements be adhered to. It is a key aspect of the induction period of the Modern Apprenticeship that apprentices are fully informed both of the regulations and that they and their employers are bound by these regulations. Modern Apprentices should be made aware of their rights and duties with regard to health and safety.

All Modern Apprentices supported by Skills Development Scotland will be required to satisfy the adequacy of SDS's Health and Safety policy and systems.

#### Contracts

The following three contracts are essential to the successful outcome of the Modern Apprenticeship programme:

- 1. Contract of employment signed by the employer and the Modern Apprentice.
- 2. SSC Training Agreement this agreement outlines the basis of the modern apprenticeship, refers to the contract of employment and includes Health and Safety responsibilities. A sample SSC Training Agreement is set out in Appendix 3.
- 3. SSC Training Plan this plan outlines the selected outcomes and the expected duration of the apprenticeship. In cases where funding is offered by SDS, the SDS Training Plan will be sufficient on condition that it contains all relevant information as set out in the Sample Training Plan at Appendix 3. Training Plans may be modified to reflect changing circumstances; however it is essential that the SSC is notified of any changes.

# **Employment status of Modern Apprentices**

It is important that the industry offers genuine employment and career prospects to those people it wishes to attract through Modern Apprenticeships. Accordingly, all apprentices must be employed.

All Modern Apprentices must have a demonstrable need to acquire **significant new knowledge and skills** to fulfil their job role. The modern apprenticeship framework selected for the employee must be the most appropriate learning programme generally available to that individual, providing such knowledge and skills.

# Terms and conditions of employment

In order to compete with other industries offering Modern Apprenticeships, attractive packages will need to be developed by employers in the industry. The terms and conditions of employment for individual Modern Apprentices will be agreed between the employer and the apprentice and should form the contract of employment.

# **Training and development**

#### **Delivery**

Training delivery can take many forms under the Modern Apprenticeship system. Some organisations may become approved SVQ Assessment Centres; others may join a consortium or use peripatetic assessors. Some large employers will be able to complete all the training and development in-house, but most employers will find that some of the training and development will have to take place away from the normal workplace. In particular the underpinning knowledge requirements are often more suited to delivery by outside training providers which might include:

- private training organisations
- colleges / universities
- other employers

Such knowledge could be delivered through training courses or through open/distance learning packages.

The option of sharing training and assessment resources amongst a cluster of employers (or across the divisions of a larger employer) will be particularly appealing to those firms which do not have the resources to provide all of the training and development. Assessment can be provided by these bodies, but the assessors and the training centre must be approved by the awarding bodies for the SVQ and Core Skills where appropriate.

## **List of Training Providers**

McCrae Training Scottish Water

# Delivery of Training for the Modern Apprenticeship in the Water Industry at SCQF Level 6

### **Work-based training**

#### **Delivery and assessment method**

Training delivery within the Modern Apprenticeship process may involve some organisations becoming SVQ approved centres (although some may already be approved); or joining a consortium or use of peripatetic assessors. There are also occasions where it may be less resource intensive if a cluster of employers share training delivery and assessment resources. Employers can also implement and manage the assessment process, but all assessors must be approved by the awarding body offering the SVQ and other qualifications within the framework.

Assessment should ensure that evidence illustrates competency across elements and units that naturally link together in terms of whole jobs; that it is derived from naturally occurring evidence collected in the workplace. Evidence must be authentic, current, sufficient, fit for purpose and valid.

Workplace evidence may be collected in the context of full time or part time employment.

Training delivery and assessment in the workplace must conform to the Energy & Utility Skills Assessment Strategy which is available from Energy & Utility Skills.

#### Skills required by training providers delivering the training

The current assessment strategy for Energy and Utility sector (2019) stipulates that assessors:

- must hold, or be working towards, valid assessor qualifications as defined by the Qualification Regulator
- must be occupationally competent in the units they are assessing. Centres must evidence that the assessor has
  achieved the award (or equivalent), at or above the level they are assessing. Alternatively, they must provide
  supporting evidence that they are able to make valid judgments through experience built up by working in the
  industry
- must have a working knowledge of the qualification and a full understanding of that part of the award for which they have responsibility for
- must demonstrate current evidence of continuing professional development in a relevant area of practice.

#### Delivery of underpinning knowledge (if no formal off-the job requirement)

Knowledge can be developed in various ways, for example, via training courses, mentoring, internal organisational training sessions, open and/or distance learning packages. Assessment of knowledge is undertaken during the portfolio assessment process of the SVQ although not all providers will use the same arrangements.

#### Off-the-job training

#### Details of off-the-job training (please state if not applicable)

Most of the delivery takes place on the job and where it does take place off the job then it should be relevant to the technical apprenticeship and the role of the individual. It is suggested that this may be around 8-10 weeks over the 24 months of the framework.

Some employers may be resourced to complete all training and development in-house, however for some employers, the expectation is that the training and development is undertaken outside the workplace, for example by private training providers, colleges or other employers. In terms of what is required to complement the work-based component, there may be suitable training courses or open/distance learning packages available.

#### **Delivery and assessment method**

Knowledge can be developed in various ways, for example, via training courses, mentoring, internal organisational training sessions, open and/or distance learning packages. Assessment of knowledge is undertaken during the portfolio assessment process of the SVQ.

#### **Exemptions**

No exemptions have been identified for the off the job components of the Water Industry Apprenticeship.

#### The SSC training plan

The plan is required to identify:

- 1 The selected Framework outcomes, specifying whether or not separate certification of the Core Skills is being sought.
- 2 A summary of the Modern Apprentice's accredited prior learning.
- 3 A timetable for achievement of the selected Framework outcomes, linked to regular progress reviews.

The Training Plan should take into account any relevant previous training and development, education or work experience. Not all Modern Apprentices need have different plans, but many will vary. Moreover as reviews take place and circumstances change so the plan itself can be modified.

However any changes must:

- be subject to the quality provisions of Skills Development Scotland (if the MA is being financially supported)
- comply with the stipulations of this Framework
- meet the needs of the employer and apprentice.

A sample Training Plan is provided at Appendix 3 of this document, however, for those Modern Apprentices funded by SDS area office it is sufficient to submit the Skills Development Scotland Training Plan on condition that it covers the same information required in the MA Training Plan.

### **Consultation Process**

In October 2019, a Steering Group comprising practitioners from the industry was established, and the content of a MAF in the Water Industry at SCQF Level 5 and SCQF Level 6 was discussed and agreed appropriate to be used as part of online survey questions designed to gather opinion from the wider industry.

In November/December 2019, an online consultation took place. A total of 7 responses were received. In addition, 3 detailed telephone interviews were carried out with key stakeholders in order to gain qualitative feedback. In instances where telephone consultees also completed the online survey, their responses were used once only, to avoid double counting.

- 43% of respondents were from the public sector
- 43% of respondents were from the private sector
- 57% represented organisations employing 250 or more employees
- 29% represented SMEs
- 22 respondents were from the voluntary sector
- 3 were from businesses
- 1 was a Training Provider
- 1 was a Local Authority
- 2 categorised themselves as 'other'.

All respondents were supportive of the creation of a MAF and provided opinions regarding possible enhancements, drawn from current and planned policy areas set out by the Scottish Government.

# **Career progression**

Following completion of the Modern Apprenticeship, candidates should be able to achieve positions in areas such as:

Modern Apprenticeships provide those entering the industry with a sound foundation for further learning and development of their careers. Career paths lead to higher levels of expertise and professionalism and can lead to degrees and management within the water industry.

Modern Apprentices will learn the skills and knowledge that they require to work in the industry. They will choose units within the qualifications that are relevant to their job roles allowing them to tailor the programme to meet their needs.

New entrants to the industry will undertake the MA at SCQF level 6 which will develop a knowledge and understanding of the water industry, including relevant practical skills. Learners can progress straight from school onto the MA at SCQF level 6.

Learners completing the Modern Apprenticeship in the Water Industry at SCQF level 6 will be able to progress within their career through a number of routes from Apprenticeships to Further / Higher Education such as:

- Modern Apprenticeship in Management
- SVQ at SCQF level 8 in a relevant area
- SCQF level 7 Professional Developments Awards such as:
  - PDA Water Operations: Waste Water Processes
  - PDA Water Operations: Drinking Water Processes

- o PDA Water Operations: Water Distribution & Utilisation
- HNC in Civil Engineering 2 Degree in Utilities Management 2 Masters in Utilities Management
- Specific industry training.

#### Typical jobs include:

**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** - 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. Communication with customers on possible disruptions.

**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 substructures, 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 such as maintenance, unblocking pumps and valves. Carry out appropriate risk assessments. Communicating with colleagues and customers.

Apprentices may also wish to continue their professional development through industry specific training or relevant professional qualifications/awards leading to membership of the Institute of Water or Chartered Environmentalist. However, this will depend on the performance and motivation of the individual and the vacancies/opportunities available within their company.

Further information is also available on the My World or Work website <a href="www.myworldofwork.co.uk">www.myworldofwork.co.uk</a> or Energy & Utilities Jobs <a href="www.myworldofwork.co.uk">www.energyutilitiesjobs.co.uk</a>.

# **Appendices**

#### **APPENDIX 1**

#### **Stakeholder Responsibilities**

Many organisations and individuals share the responsibility for ensuring that the Modern Apprenticeship programme is implemented to the highest possible standard. They include:

- Awarding Bodies
- Employers
- Modern Apprentices
- Modern Apprenticeship Group (MAG)
- Sector Skills Councils (SSCs)
- Skills Development Scotland
- Training Providers

#### **Role of the Sector Skills Councils**

SSCs are responsible for developing Modern Apprenticeship Frameworks and are required to work with employers in their sectors to ensure that all Frameworks meet the needs of employers in their sectors.

For details on your sector's SSC, follow the link to the Federation for Industry Sector Skills and Standards website <a href="http://fisss.org/">http://fisss.org/</a>.

#### Role of Skills Development Scotland (SDS)

MA frameworks are used by employers as part of their workforce development to train new employees and up-skill existing members of staff. They can be (and often are) used regardless of whether financial support is available from the delivery body who currently provides a 'contribution' towards the cost of delivery. However, only approved MA Frameworks will be eligible for funding support from Skills Development Scotland who should be contacted to establish the availability and level of support for each MA Framework.

Further information is available from: <a href="http://www.skillsdevelopmentscotland.co.uk/our-services/modern-apprenticeships.aspx">http://www.skillsdevelopmentscotland.co.uk/our-services/modern-apprenticeships.aspx</a>

SDS provides advice and guidance to individuals on the range of Modern Apprenticeships and training providers available. Individuals are signposted to opportunity providers who offer training in the vocational areas of interest.

Responsibilities include:

- Supporting the Modern Apprentice with ongoing Career Planning advice
- Signposting candidates to suitable vacancies
- · Promoting the Modern Apprenticeship route on the Skills Development Scotland website
- · Facilitating recruitment events that bring together jobseekers and opportunity providers

#### **Role of the Awarding Bodies**

A significant proportion of the Modern Apprenticeship is based on the assessment of the apprentice against SVQs/ CBQs or SVQ/ CBQ units. These qualifications are accredited by the SQA Accreditation and the Office of the Qualifications and Examinations Regulator (Ofqual) and are offered by Awarding Bodies.

It is the responsibility of the Awarding Bodies to ensure that centres are approved, that assessors and verifiers are suitably qualified, trained and monitored, and that all of the assessment criteria of the SVQs/ CBQs and SVQ/CBQ units are fully met.

### **Role of the Training Provider**

The role of the training provider is important to the success of the Modern Apprenticeship. A training provider can be a further education college, a private or voluntary training company or in some cases the employer themselves or employer partnerships.

#### **Training Providers are responsible for:**

- Confirming an appropriate MA programme for candidates
- Agreeing the training needs of the candidates
- Agreeing roles and responsibilities for on the job training
- Agreeing where off the job training will be required and defining roles and responsibilities for this with relevant parties
- Ensuring trainee/candidate has access to the best quality training opportunities available
- Ensuring that the Modern Apprentices and employers fully understand the principles and processes of competence-based assessment
- Registering of MA candidates with the relevant SSC (and Skills Development Scotland if appropriate).
- Compiling and agreeing assessment schedules/assessment plans
- Judging performance evidence
- Completing assessment records
- Reviewing candidates progress at regular intervals
- Submitting records and evidence for moderation
- Advising the Modern Apprentice who to approach for support, advice, encouragement and in case of complaint

#### Role of the Modern Apprenticeship Group (MAG)

MAG is an independent group drawn from key stakeholders involved in the management and delivery of the Apprenticeship programme in Scotland.

#### MAG is responsible for:

- Approval and re-approval of Modern Apprenticeship Frameworks
- De-approval of Modern Apprenticeship Frameworks
- Encouraging best practice across Modern Apprenticeship Frameworks and sectors

#### **Role of the Employer**

Employers' responsibilities include:

- Paying all Modern Apprentices in accordance with company policy and in line with current legislation
- Agreeing roles and responsibilities for on the job training
- Agreeing where off the job training will be required and define roles and responsibilities for this with relevant parties

- Highlighting opportunities for the Modern Apprentice to demonstrate competence
- Meeting with Trainers, Assessors, Verifiers and the Modern Apprentices to review progress
- Witnessing candidate performance and verifying evidence
- Releasing Modern Apprentices for college/off-the-job training in line with training plan
- Ensuring the experience, facilities and training necessary to achieve the outcomes of the training plan.
- Supporting and encouraging Modern Apprentices and rewarding achievement
- Taking responsibility for the Health & Safety of Modern Apprentices.

#### **Role of the Modern Apprentice**

Modern Apprentices have the same responsibilities to their employer as any other employee. In addition, they have a range of commitments to their training programme.

#### Modern Apprentices' responsibilities include:

- Observing the company's terms and conditions of employment
- Agreeing a training/development plan with all parties involved
- Undertaking development in line with agreed training plan
- Attending meetings with trainers, assessors and verifiers as required
- Attending college/off-the-job training where required
- Providing evidence of competence
- Developing a collection of evidence (portfolio) and retain ownership of this throughout
- Behaving in a professional manner throughout

#### **APPENDIX 2**

### **Modern Apprenticeship Centres (MACs)**

Modern Apprentices may only be registered through organisations approved by the SSC to deliver this Framework. Such approved organisations are called Modern Apprenticeship Centres (MACs)

The MAC may be the employer of the apprentice or a separate organisation such as a training provider, further education college, a private or voluntary training company or in some cases the employer themselves or employer partnerships.

In order to be approved, organisations must make a formal application to the SSC, seeking approval and establishing that the centre satisfies the following criteria:

#### **Either**

1 be approved by an appropriate Awarding Body as a centre for the assessment of the relevant SVQ/ CBQ (and Core Skills if these are being separately certificated)

or

be capable of demonstrating a contractual relationship with another approved centre for the assessment of those units for which the MAC does not have approval from an appropriate Awarding Body.

#### In addition

The SSC will maintain a database of MACs for the delivery of the Framework within Scotland, which will be available to employers and others.

Organisations wishing to become MACs who have yet to obtain the necessary Awarding Body approval for assessment should first contact the Awarding Body direct.

Organisations wishing to be accredited with SQMS (or other appropriate quality system) should contact Skills Development Scotland.

In addition to the assessment of the Modern Apprentice against the relevant standards set by the selected Framework outcomes, the MAC has responsibility for:

- Entering into a formal training agreement with the employer and Modern Apprentice
- Registering Modern Apprentices as candidates for the relevant SVQ/ CBQ (s) and other selected units with the appropriate Awarding Body
- Registering Modern Apprentices with the SSC
- Applying for the final `Certificate of Completion' on behalf of Modern Apprentices
- Informing the SSC of any material alterations to Modern Apprentices' training plans or desired changes to the selected Framework outcomes.

#### **APPENDIX 3**



#### MODERN APPRENTICESHIP SAMPLE TRAINING AGREEMENT

This Training Agreement is entered into by:

Name of Employer:	
Name of Modern Apprentice:	
The state of the s	
Name of Modern Apprenticeship	
Centre:	

#### The **Employer's responsibilities** are to:

- 1 employ the modern apprentice subject to the employer's usual terms and conditions of employment;
- 2 provide the modern apprentice with the facilities, training and work place opportunities necessary to achieve the selected Framework outcomes specified in the apprentice's personal training plan;
- 3 pay the modern apprentice an agreed salary which reflects the obligations of the employer and the opportunities for the apprentice;
- 4 in the event of the employer becoming unable to retain the modern apprentice after completion of the apprenticeship, to use reasonable endeavours to secure employment elsewhere;
- 5 in the event of the apprenticeship being terminated prematurely by either the employer or modern apprentice for any reason other than dismissal for unsatisfactory performance or misconduct, to use reasonable endeavours to secure employment and continuation of this apprenticeship elsewhere;
- 6 operate a formal Health and Safety policy and undertake the necessary legal and contractual responsibilities for health and safety of the modern apprentice; and
- 7 operate an Equal Opportunities policy which meets all legal requirements.

#### The Modern Apprentice's responsibilities are to:

- work for the employer in accordance with the agreed terms and conditions of employment;
- 2 undertake training, attend courses if required, keep records, and take assessments to be determined by the employer and/or Modern Apprenticeship Centre, and carry out such work as may be required in order to achieve the selected Framework outcomes specified in the apprentice's personal training plan;
- 3 be diligent, punctual, behave in a responsible manner and in accordance with the requirements of Health and Safety legislation relating to the apprentice's responsibilities as an individual; and
- 4 promote at all times the employer's best interests.

#### The Modern Apprenticeship Centre's responsibilities are to:

- agree the content of the modern apprentice's personal training plan as confirming that the selected Framework outcomes and training plans meet the criteria of this modern apprenticeship
- 2 contract with the employer to provide the training and assessment necessary to enable the modern apprentice to achieve the selected Framework outcomes specified in the apprentice's personal training plan; and
- 3 use its best endeavours to ensure that the employer provides the modern apprentice with the facilities, training and work place opportunities necessary to achieve the selected Framework outcomes specified in the apprentice's personal training plan.

This agreement to be signed by all parties:

Employer	Date:
Modern Apprentice	Date:
Modern Apprenticeship Centre	Date:



#### MODERN APPRENTICESHIP TRAINING PLAN

The Modern Apprenticeship Centre		
Name:		
Address:		
Telephone:		
Contact:		
The Modern Apprentice		
Full name:		
Home address:		
Work address:		
Date of birth:		
Date of birth.		
The Employer		
Name:		
Address:		
Telephone:		
Contact:		
Skills Development Scotland office		
Name:		
Address:		
Telephone:		
Contact:		

### Framework selected outcomes Mandatory outcomes

	CBQ Level (please identify level) andatory and optional units)	Tick units being undertaken	SCQF Level	SCQF Credit Points
	CBQ <b>level (please identify level)</b> andatory and optional units)			
Enhan	cements			

Core S	Skills de details of the minimum level required)	Tick units being undertaken	SCQF Level	SCQF Credit Points
1	Communication			
2	Working with others			
3	Numeracy			
4	Information and communication technology			
5	Problem Solving			

# **Optional outcomes**

Additional units (if any)  These are optional and should reflect the individual training needs of the Apprentice	Tick units being undertaken	SCQF Level	SCQF Credit Points
(specify unit)			

Summary of Modern Apprentice's accredited prior learning:	
If you require assistance in completing this form, please contact:	
Energy & Utility Skills Limited Friars Gate 1011 Stratford Road	
Shirley	
Solihull B90 4BN	