

apprenticeship FRAMEWORK

Nuclear Working -Non-Statutory (Wales)

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Nuclear Working -Non-Statutory (Wales)

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Framework summary

Nuclear Working -Non-Statutory

Foundation Apprenticeship in Nuclear Working

Pathways for this framework at level 2 include:

Pathway 1: Nuclear Decommissioning

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Diploma in Nuclear Decommissioning (QCF)

Knowledge qualifications available to this pathway:

K1 - BTEC Level 2 Extended Certificate in Engineering (QCF)

K2 - BTEC Level 2 Diploma in Engineering (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 2: Radiation Protection

Competence qualifications available to this pathway:

N/A

Knowledge qualifications available to this pathway:

N/A

Combined qualifications available to this pathway:

B1 - Level 2 NVQ Diploma in Radiation Protection (QCF)

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Framework information

Information on the Publishing Authority for this framework:

Cogent

The Apprenticeship sector for occupations in chemical manufacturing, nuclear science, oil and gas extraction (also includes process technology, bioscience, polymer and sign making).

| | |
|---|--|
| Issue number: 3 | This framework includes: |
| Framework ID: FR01879 | Level 2 |
| Date this framework is to be reviewed by: 16/07/2012 | This framework is for use in: Wales |

Short description

The Nuclear Working Apprenticeship Framework provides work based training for young people and adults wishing to enter the nuclear sector. Apprentices would undertake skills and knowledge training in one of the following two areas, nuclear decommissioning or radiation protection.

There is one level of Apprenticeship contained in this framework:

- The Foundation Level Apprenticeship (Level 2) in Nuclear Working (will take a minimum of between takes 12 to 24 months to complete)

The framework contains details of vocational qualifications; knowledge based technical qualifications, Essential Skills Wales (Communication, Application of Number, Information Technology), and employee rights and responsibilities required for an apprenticeship in Nuclear Working.

Apprentices undertake training on-the-job at their workplace and off-the-job usually delivered by a local training provider or Further Education College.

Contact information

Proposer of this framework

Cogent Sector Skills Council has published this non-statutory Apprenticeship Frameworks prior to the designation of issuing authorities for Wales.

Without the support of industry this Apprenticeship Framework could never have been developed.

Cogent SSC and its industrial partners will continue to work together to make sure that then future requirements of the nuclear new build projects in Wales are reflected in this Apprenticeship Framework. In future reviews.

Developer of this framework

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Revising a framework

Contact details

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Why this framework is being revised

December 2012:

To update information in the framework following a formal evaluation and review by the industry and the training provider who delivers the Foundation Apprenticeship Framework

This Framework was found Fit for Purpose with the addition of the Triple Bar Industry Training qualification.

Summary of changes made to this framework

The addition of the Triple Bar Industry Training Qualification.

Qualifications removed

None

Qualifications added

The Triple Bar Industry Training Qualification.

Qualifications that have been extended

None

Purpose of this framework

Summary of the purpose of the framework

Cogent Sector Skills Council has published this non-statutory Apprenticeship Frameworks prior to the designation of issuing authorities for Wales.

This framework has been designed to meet the requirements for the type of work undertaken in the nuclear industry. Nuclear power is an efficient source of energy that helps to cut down on carbon emissions, and the government has outlined plans to build more nuclear power stations. The UK's nuclear industry employs over 50,000 people with approximately 1,500 people being directly employed in Wales. The nuclear industry in Wales is localised to North West Wales with two nuclear facilities in Gwynedd. Trawsfynydd Power Station is undergoing decommissioning and in Anglesey, Wylfa Power Station started defueling in 2010 and this will take till 2012 to complete. A new nuclear power station is planned to be built next to the current Wylfa Power Station.

Once a nuclear power station reaches the end of its working life it must be safely shut down and decommissioned. With the advent of 'new build' for a fleet of modern nuclear power stations, as well as existing operations and decommissioning means there are a number of opportunities across the sector.

The industry is supported by a wide variety of supply chain companies, such as engineering and construction contractors, fabricators of specialist equipment, manufacturers and specialist service providers, which may provide further opportunities for employment.

After undergoing this Foundation Level Apprenticeship Framework, skilled operatives and technicians could find themselves working in a variety of roles within the Nuclear Industry. A Decommissioning Operative would be involved in the safe decommissioning of plant and equipment on a licensed nuclear site. A Radiation Monitor would play a key role in the safe monitoring of personnel and work environments.

Within the industry there are many opportunities to progress to technician, supervisory or management roles. British nuclear industry skills are also highly valued abroad.

There will be an ongoing need to attract new young people and adults to meet emerging technological challenges such as the expected expansion due to new build as well as to replace the ageing workforce within the sector. This Apprenticeship Framework will help to ensure that the skills pipeline is robust both in terms of quantity and capability.

Aims and objectives of this framework (Wales)

Aim

To provide a trained workforce for the Nuclear Industry that will enable them to compete in a global market.

The objectives of this framework are:

1. To provide the skilled operators to meet future demand forecasted by the nuclear industry.
2. To provide a structured training framework that will provide the skills needed to decommission and carry out radiation protection activities.
3. To provide a development framework for existing staff in the nuclear industry to up-skill their current vocational skills and knowledge that will enable them to meet the future challenges of new technologies and changing production processes.
4. To provide progression opportunities for apprentices both within the nuclear industry and employment in other sectors as well as for those wishing to engage in further study in Further or Higher Education.
5. To attract new talent into the nuclear industry from a range of backgrounds, in order to meet industry requirements.

Entry conditions for this framework

Rules to Avoid Repeating Qualifications;

Processes exist to make sure that applicants with prior knowledge, qualifications and experiences are not disadvantaged by having to repeat learning. Training providers and awarding organisations will be able to advise on the current rules for accrediting prior learning and recognising prior experience. Refer to on and off the job training section for guidance about prior attainment and achievement. In the meantime, this is a short summary:

There are no relaxations or proxies for any qualifications specified in a framework in SASW, however, providers are encouraged to identify additional on – the –job training programmes that customise the learning to the new workplace.

1. Essential Skills Wales.

- If applicants already have GCSEs in English, Maths and/or Information and Communications Technology (ICT) they still have to do the Essential Skills Wales at the relevant level as these are new qualifications and proxies do not exist.
- If applicants already have achieved Key Skills at the relevant level, they will not have to do the relevant Essential Skills Wales (ESW), however, apprentices can be encouraged to complete ESW at a higher level if appropriate.

2. Knowledge qualifications. If applicants already have one of the level 3 Knowledge qualifications before they started their Apprenticeship, (see knowledge qualification page in this framework) they can count this and do not have to redo the qualification, providing that they have achieved this qualification within 3 years of applying for the apprenticeship certificate. For example they may have already achieved the knowledge element as part of the Welsh Baccalaureate. The hours spent gaining this qualification will also count towards the minimum hours required this framework.

3. Competence qualifications. If applicants already have the level 3 Competence qualification for the Apprenticeship they do not have to repeat this qualification, however, this qualification must have been achieved within in 1 year of applying for the apprenticeship certificate and they will still have demonstrate competence in the workplace.

4. Prior experience. Applicants already working in the sector will be able to have their prior experiences recognised by the Awarding Organisation and this will count towards the competence and the knowledge qualifications in this framework.

Initial Assessment

Training Providers and employers will use initial assessment to ensure that applicants have a fair opportunity to demonstrate their ability and to tailor the programme to meet individual needs, recognising prior qualifications and experiences.

Apprenticeship applicants will be expected to attend an interview with the employer/ training provider to assess their suitability for entry on to the framework. The interview provides an opportunity to talk directly to the applicant and discuss an individual's previous learning and experience. From this interview the employer will be able to decide whether a candidate is suitable using some of the following guidance.

Foundation Apprenticeship

The Foundation Apprenticeship in Nuclear Working is open to all people aged 16 or over. Due to the competition for places the following skills and attributes relevant to working within the Nuclear Industries may be considered as part of the application process;

- motivation to succeed within industry
- an awareness of the demands of the Apprenticeship
- willingness to comply with employer/training provider terms and conditions of employment
- have the ability to apply learning in the workplace
- willingness to work with due regard to Health and Safety of self and others
- effective communication with a range of people.

Please Note:

As part of the entry conditions for employment in the nuclear industry all applicants will have to undergo a security check.

The following examples of evidence can be used to support some of the above statements, such as;

- previous work experience or employment *or*
- voluntary or community based work *or*
- achievement of GCSEs (A*-E) or equivalent qualifications in Maths, English and Science *or*
- achievement of the Welsh Baccalaureate (Foundation/ Intermediate Diploma) Principal Learning in Manufacturing & Product Design or Engineering *or*
- achievement of Awards, Certificates or Diplomas in a related industry such as Science or Engineering *or*
- proof of completion of non-accredited courses.

All Apprenticeship applicants should be aware of the varied working conditions that may include;

- working at heights
- shiftwork (including nights and weekends)
- 365 day operations
- working outdoors
- wearing specialist safety equipment
- working within high hazard environment.

Level 2

Title for this framework at level 2

Foundation Apprenticeship in Nuclear Working

Pathways for this framework at level 2

- Pathway 1: Nuclear Decommissioning
- Pathway 2: Radiation Protection

Level 2, Pathway 1: Nuclear Decommissioning

Description of this pathway

Nuclear Working (Decommissioning Operative)

Total minimum credit value for this pathway: 108 Credits:

- 60 Credits for Competence
- 30 Credits for Knowledge
- 18 Credits for Essential Skills English, Mathematics and ICT

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

None.

| Job title(s) | Job role(s) |
|---------------------------|--|
| Decommissioning Operative | Safely dismantle, remove and dispose of plant and equipment, including pumps, valves, tanks and vessels. |

Qualifications

Competence qualifications available to this pathway

| C1 - Level 2 NVQ Diploma in Nuclear Decommissioning (QCF) | | | | | |
|---|------------|-----------------------|--------------|-----------------------|-------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| C1a | 500/6185/9 | PAA\VQSET | 60 | 254 | N/A |

Knowledge qualifications available to this pathway

| K1 - BTEC Level 2 Extended Certificate in Engineering (QCF) | | | | | |
|---|------------|-----------------------|--------------|-----------------------|-------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K1a | 500/7577/9 | Edexcel | 30 | 180 | N/A |

| K2 - BTEC Level 2 Diploma in Engineering (QCF) | | | | | |
|--|------------|-----------------------|--------------|-----------------------|-------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| K2a | 500/7576/7 | Edexcel | 60 | 360 | N/A |

Combined qualifications available to this pathway

N/A

Notes on competence and knowledge qualifications (if any)

K1-The BTEC Level 2 Extended Certificate in Engineering (QCF) 30 Credits or K2-The BTEC Level 2 Diploma in Engineering (QCF) 60 Credits will provide the underpinning knowledge and understanding for The PAA\VQSET Level 2 NVQ Diploma in Nuclear Decommissioning (QCF) 60 Credits.

The decision on which knowledge qualification the apprentice will undertake will be made by the training provider and employer, based on the experience of the apprentice, future job role requirements and the complexity of the employer's operations. It is possible to achieve this apprenticeship by undertaking the minimum knowledge qualification of 180 Guided Learning Hours. The knowledge qualification of 360 Guided Learning Hours will provide a more in-depth technical knowledge if required.

The credit values and guided learning hours quoted in the above tables are the minimum for the qualification as stated on the Register of Regulated Qualifications. These credit values and guided learning hours may vary according to specific pathways/ options taken within qualifications. For further details please refer to the Register of Regulated Qualifications (<http://register.ofqual.gov.uk/>).

Transferable skills (Wales)

Essential skills (Wales)

| | Minimum level | Credit value |
|------------------------|---------------|--------------|
| Communication | Level 1 | 6 |
| Application of numbers | Level 1 | 6 |
| IT | Level 1 | 6 |

Progression routes into and from this pathway

Progression into this pathway:

There are no pre-defined routes of entry to the Nuclear Working Apprenticeship; however, new entrants to the industry may be looking to progress from the following areas:

- Work based qualifications such as NVQs/ SVQs or vocationally related qualifications in an Engineering related subject. (Examples may include: BTEC's, City & Guilds, PAA/VQ-SET Diplomas/ Certificates/ Awards)
- GCSEs in Science, Maths or Engineering also provide a strong platform for progression on to the framework.
- Welsh Baccalaureate (Foundation/ Intermediate Diploma) Principal Learning in Engineering or Manufacturing & Product Design also provides an excellent opportunity for progression in to the nuclear industry.
- Previous experience in the nuclear industry or a related discipline can also be an appropriate route of entry.

Please Note:

As part of the entry conditions for employment in the nuclear industry all applicants will have to undergo a security check.

Progression from this pathway:

Following completion of this Foundation Apprenticeship there are several options open to the successful candidate who wishes to continue their development in order to progress their career. There are opportunities to continue to undertake further vocational training or academic qualifications. These may include (but are not exclusive to) the following:

- Apprenticeship in related area.
- Welsh Baccalaureate (Intermediate/ Advanced Diploma) Principal Learning in Engineering or Manufacturing & Product Design
- Developing a career in coaching through undertaking Assessor and Verifier Awards
- Qualifications in a related area, including (but not limited to) Health & Safety, Training & Development, Business Improvement Techniques and Supervisory Management.
- Cogent Nuclear Job Context training and qualifications (www.cogent-prospectus.com)

Within the industry there are many opportunities to progress to technician, supervisor or management roles. These opportunities will increase over the coming years with the advent of new build and as the impact of an ageing workforce takes effect.

Successful completion of the Foundation Apprenticeship could lead to one of the following job roles:

- Decommissioning Operative
- Decommissioning Team Leader

For a more in-depth look at careers within the Cogent Industries, please look at our careers pathway website www.cogent-careers.com

Delivery and assessment of employee rights and responsibilities

This Employee Rights and Responsibilities (ERR) section has no QCF Credit Value.

It is important that all employees understand and can demonstrate an understanding of their rights & responsibilities as an employee.

The Cogent Employee's Rights and Responsibilities (ERR) Workbook and Assessment Document has been designed to assist employers and training providers and should be used to deliver this mandatory element of the Apprenticeship Framework.

The content is as follows: -

1. Statutory rights and responsibilities under Employment Law.
2. Procedures and documentation that affect the relationship between employee and employer.
3. Sources of information and advice on employment rights and responsibilities.
4. The role played by an Apprentice's occupation in the organisation and industry.
5. Career pathways open to an Apprentice.
6. The types of representative bodies relevant to the industry and organisation and their main roles and responsibilities.
7. Where and how to get advice on the industry, occupation, training and careers.
8. Organisational principles and codes of practice.
9. Issues of public concern that affect the organisation and industry.

It is essential that the Apprentice can demonstrate competence in ERR and, as a result, is required to provide documentary evidence confirming their achievements. Examples of how the evidence can be gathered by individuals include;

- completing a company induction,
- attending relevant taught off-the-job training sessions
- on-the-job assessment.

When applying for the Foundation Apprenticeship the training provider or employer will provide evidence that ERR has been achieved by submitting a copy of the completed assessment document, signed by both the apprentice and the assessor.

To obtain a copy of the workbook and assessment document, please visit the Apprenticeships section of the Cogent website. (www.cogent-ssc.com)

Level 2, Pathway 2: Radiation Protection

Description of this pathway

Nuclear Working (Radiation Monitor)

Total minimum credit value for this pathway: 103 Credits

- 88 Credits for the combined qualification Competence/Knowledge
- 16 Credits for Essential Skills english, mathematics and ICT

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

None

| Job title(s) | Job role(s) |
|---------------------|--|
| Radiation Monitor | Monitor radiation levels of personnel and the working environment. |

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

| B1 - Level 2 NVQ Diploma in Radiation Protection (QCF) | | | | | |
|--|------------|-----------------------|--------------|-----------------------|-------------------|
| No. | Ref no. | Awarding organisation | Credit value | Guided learning hours | UCAS points value |
| B1a | 500/6152/5 | PAA\VQSET | 38 | 162 | N/A |

Notes on competence and knowledge qualifications (if any)

Level 2 NVQ Diploma in Radiation Protection (QCF) - 38 Credits

Apprentices must complete 14 Units totalling a minimum of 38 Credits. 12 mandatory units and 2 optional units (1 competence, 1 knowledge).

[C] = Competence

[K] = Knowledge

MANDATORY UNITS

Respond to Radiation Incidents Within Ionising Radiation Environments [C] – 3 Credits

How to Respond to Radiation Incidents Within Ionising Radiation Environments [K] – 4 Credits

Monitor Radiation Hazards within Ionising Radiation Environments [C] – 3 Credits

How to Monitor Radiation Hazards within Ionising Radiation Environments [K] – 3 Credits

Monitor Radiation Conditions During Work Activities Within Ionising Radiation Environments [C] – 2 Credits

How to Monitor Radiation Conditions During Work Activities Within Ionising Radiation Environments [K] – 3 Credits

Monitor People During Radiation-Related Work Activities Within Ionising Radiation Environments [C] – 2 Credits

How to Monitor People During Radiation-Related Work Activities Within Ionising Radiation Environments [K] – 2 Credits

Monitor Environmental Conditions During Radiation-Related Work Activities Within Ionising Radiation Environments [C] – 3 *Credits*

How to Monitor Environmental Conditions During Radiation-Related Work Activities Within Ionising Radiation Environments [K] – 3 *Credits*

Test the Functioning of Radiation Protection Equipment Within Ionising Radiation Environments [C] – 3 *Credits*

How to Test the Functioning of Radiation Protection Equipment Within Ionising Radiation Environments [K] – 3 *Credits*

OPTIONAL UNITS

Learners must achieve 2 optional units totalling a minimum of 4 Credits, consisting of one knowledge unit, plus its corresponding competence unit from the combinations outlined below.

Undertake Radiation-Related Work Activities within Ionising Radiation Environments [C]– 2 *Credits*

How to Undertake Radiation-Related Work Activities within Ionising Radiation Environments [K]– 2 *Credits*

Or

Record Information on Radiation Protection within Ionising Radiation Environments [C] – 2 *Credits*

How to Record Information on Radiation Protection within Ionising Radiation Environments [K]– 2 *Credits*

Transferable skills (Wales)

Essential skills (Wales)

| | Minimum level | Credit value |
|------------------------|---------------|--------------|
| Communication | Level 1 | 6 |
| Application of numbers | Level 1 | 6 |
| IT | Level 1 | 6 |

Progression routes into and from this pathway

Progression into this pathway:

There are no pre-defined routes of entry to the Nuclear Working Apprenticeship; however, new entrants to the industry may be looking to progress from the following areas:

- Work based qualifications such as NVQs/ SVQs or vocationally related qualifications in an Engineering related subject . (Examples may include: BTEC's, City & Guilds, PAA/VQ-SET Diplomas/ Certificates/ Awards)
- GCSEs in Science, Maths or Engineering also provide a strong platform for progression on to the framework.
- Welsh Baccalaureate (Foundation/ Intermediate Diploma) Principal Learning in Engineering or Manufacturing & Product Design also provide an excellent opportunity for progression in to the nuclear industry.
- Previous experience in the nuclear industry or a related discipline can also be an appropriate route of entry.

Please Note:

As part of the entry conditions for employment in the nuclear industry all applicants will have to undergo a security check.

Progression from this pathway:

Following completion of this Foundation Apprenticeship there are several options open to the successful candidate who wishes to continue their development in order to progress their

career. There are opportunities to continue to undertake further vocational training or academic qualifications. These may include (but are not exclusive to) the following:

- Advanced Level Apprenticeship in related area.
- Welsh Baccalaureate (Intermediate/ Advanced Diploma) Principal Learning in Engineering or Manufacturing & Product Design
- Developing a career in coaching through undertaking Assessor and Verifier Awards
- Qualifications in a related area, including (but not limited to) Health & Safety, Training & Development, Business Improvement Techniques and Supervisory Management.
- Cogent Nuclear Job Context training and qualifications (www.cogent-prospectus.com)

Successful completion of the Foundation Apprenticeship could lead to one of the following job roles:

- Radiation Monitor
- Radiation Monitor Team Leader
- Health Physics Monitor

For a more in-depth look at careers within the Cogent Industries, please look at our careers pathway website www.cogent-careers.com.

Delivery and assessment of employee rights and responsibilities

This Employee Rights and Responsibilities (ERR) section has no QCF Credit Value.

It is important that all employees understand and can demonstrate an understanding of their rights & responsibilities as an employee.

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2. Procedures and documentation that affect the relationship between employee and employer.
3. Sources of information and advice on employment rights and responsibilities.
4. The role played by an Apprentice's occupation in the organisation and industry.
5. Career pathways open to an Apprentice.
6. The types of representative bodies relevant to the industry and organisation and their main roles and responsibilities.
7. Where and how to get advice on the industry, occupation, training and careers.
8. Organisational principles and codes of practice.
9. Issues of public concern that affect the organisation and industry.

It is essential that the Apprentice can demonstrate competence in ERR and, as a result, is required to provide documentary evidence confirming their achievements. Examples of how the evidence can be gathered by individuals include;

- completing a company induction,
- attending relevant taught off-the-job training sessions
- on-the-job assessment.

When applying for the Foundation Apprenticeship the training provider or employer will provide evidence that ERR has been achieved by submitting a copy of the completed assessment document, signed by both the apprentice and the assessor.

To obtain a copy of the workbook and assessment document, please visit the Apprenticeships section of the Cogent website. (www.cogent-ssc.com)

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

How equality and diversity will be met

The Foundation Apprenticeship in Nuclear Working aims to promote diversity, opportunity and inclusion by offering high-quality learning opportunities.

The delivery of the Foundation Apprenticeship Framework must be in environments free from prejudice and discrimination where all learners can contribute fully and freely and feel valued.

There must be no overt or covert discriminatory practices in selection and recruitment of Apprentices to the programme, which is available to all people, regardless of gender, ethnic origin, religion/belief, sexual orientation or disability who meet the stated selection criteria.

Issues in Wales

Gender: the nuclear industry is heavily male dominated with less than 1% of women represented within the sector.

Ethnicity: the nuclear industry has an under-representation of ethnic minority groups within the workforce .

Age: the nuclear industry has an ageing workforce with less than 5% under 25 years of age.

Barriers

Geographical location of the various nuclear industry sites is away from areas with high concentrations of ethnic minorities. Whilst the modern nuclear industry in the UK is efficient, clean and has a good safety record, there is still a misconception the work is dirty and dangerous. Staff turnover is limited due to good levels of pay giving high retention rates. Also the geographical isolation of many sites contributes to the high retention rates.

Actions

Cogent have introduced a series of industry specific case studies and Careers Pathways on the Cogent Careers web site (www.cogent-careers.com) to encourage people from all backgrounds to enter the nuclear industry.

Cogent works very closely with the National Skills Academy for Nuclear to promote various initiatives such as Energy Foresight within schools. (www.nuclear.nacademy.co.uk)

Cogent regularly support regional/ national careers fairs/ skills events in Wales to promote apprenticeships, providing an ideal opportunity to address issues faced by women and ethnic minorities.

Cogent are also working with representative groups such as the United Kingdom Resource Centre, engaging with their Women in Science and Engineering Work programmes.

On and off the job training (Wales)

Summary of on- and off-the-job training

For Foundation Apprenticeships the hours outlined in the sections that follow may vary depending on previous experience and attainment of the apprentice. Where a learner enters an apprenticeship agreement having previously attained or acquired the appropriate competence or knowledge, this prior learning needs to be recognised and documented using the relevant QCF credit transfer, QCF exemption or Recognition of Prior Learning (RPL) procedures. The amount of 'on-the-job' training required to complete the apprenticeship under the apprenticeship agreement may then be reduced accordingly, provided the total numbers of 'on-the-job' hours for this framework can be verified for apprenticeship certification.

Those apprentices who commence training under a new apprenticeship agreement with a new employer may bring a range of prior experience with them. When an apprentice can claim 5% or more hours towards the 'on-the-job' framework total through prior learning acquired from previous full-time education, employment or other vocational programme, then the apprentice's learning programme should include "customisation". Training providers are encouraged to identify additional 'on-the-job' training programmes that customise the learning to the new workplace. Customisation programmes may include selecting appropriate additional Unit(s) from QCF qualifications, or relevant units recognised as Quality Assured Lifelong Learning [QALL] through a CQFW recognised body, or follow Essential Skills at a level higher than that specified in the framework, including one or more Wider Key Skills or other competency-based qualifications/units relevant to the workplace.

For apprentices who have already achieved the relevant qualification, they must have been certificated within 5 years from the date of application for the Foundation Apprenticeship Certificate or have been continuously employed in the industry for a minimum duration of 3 years.

Job roles within the Nuclear Industry require a thorough level of technical competence and knowledge which will be undertaken through work-based training, practice, experience and academic study.

'On-the-job' learning must be formally recorded, either in a diary, workbook, and portfolio or be verified by attendance records. This evidence needs to be checked and signed by the

employer or mentor. These records of hours may need to be submitted to the Certifying Authority when applying for an apprenticeship completion certificate.

Below are the 'off-the-job' and 'on-the-job' training hours for the Nuclear Working pathways. The components of the framework undertaken will be decided by the employer, provider and the apprentice and will be based on the employer's requirements and the prior achievements and past experiences of the apprentice.

There are two pathways contained in this Foundation Apprenticeship:

- 1) Nuclear Decommissioning
- 2) Radiation Protection

- The Foundation Apprenticeship (Level 2) In Nuclear Working (Usually takes 12 to 24 months to complete)

Total Training Hours for Foundation Apprenticeship Pathways

Foundation Apprenticeship Nuclear Decommissioning Pathway 1a: 649 Total Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Nuclear Decommissioning (QCF) (254 Training Hours).
BTEC Level 2 Extended Certificate in Engineering (QCF) (180 Training Hours)
Other framework requirements covering Essential Skills Wales, ERR and mentoring (215 Training Hours)

Foundation Apprenticeship Nuclear Decommissioning Pathway 1b: 829 Total Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Nuclear Decommissioning (QCF) (254 Training Hours).
BTEC Level 2 Diploma in Engineering (QCF) (360 Training Hours)
Other framework requirements covering Essential Skills Wales, ERR and mentoring (215 Training Hours)

Foundation Apprenticeship in Radiation Protection Pathway 2a: 377 Total Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Radiation Protection (QCF) (162 Training Hours). This is a combined qualification covering both knowledge and competence.
Other framework requirements covering Essential Skills Wales, ERR and mentoring (215 Training Hours)

Minimum credits for each pathway:

- Nuclear Decommissioning Foundation Apprenticeship Pathway 1a: 108 Credits
- Nuclear Decommissioning Foundation Apprenticeship Pathway 1b: 138 Credits

- Radiation Protection Foundation Apprenticeship Pathway 2a: 56 Credits

Off-the-job training

'Off-the-job' training

'Off-the-job' training is defined as time for learning activities away from normal work duties.

For this framework the training hours for 'off-the-job' training are follows:

Foundation Apprenticeship

Below are the 'off-the-job' hours for the Nuclear Working pathways. The components of the framework undertaken will be decided by the employer, provider and the apprentice, based on the employer's requirements and the prior achievements and past experiences of the apprentice.

For either of the two Nuclear Decommissioning pathways or the Radiation Protection pathway the additional framework requirements covering Essential Skills Wales, ERR and mentoring are met through 215 'off-the-job' training hours.

Nuclear Decommissioning Pathway 1a: 395 'off-the-job' Training Hours

BTEC Level 2 Extended Certificate in Engineering (QCF) (180 'off-the-job' Training Hours)
Additional framework requirements (215 'off-the-job' Training Hours)

Nuclear Decommissioning Pathway 1b: 575 'off-the-job' Training Hours

BTEC Level 2 Diploma in Engineering (QCF) (360 'off-the-job' Training Hours)
Additional framework requirements (215 'off-the-job' Training Hours)

Radiation Protection Pathway 2a: 329 'off-the-job' Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Radiation Protection (QCF) (114 'off-the-job' Training Hours)

This is a combined qualification that includes 'on-the-job' and 'off-the-job' Training Hours.
Additional framework requirements (215 'off-the-job' Training Hours)

How this requirement will be met

Foundation Apprenticeship

Pathway – Nuclear Decommissioning:

Evidence:

Copy of a Certificate for the knowledge qualification –

- Level 2 Extended Certificate in Engineering (QCF) or
- Level 2 Diploma in Engineering (QCF)

Copies of the required Certificates for Essential Skills Wales

Copy of the completed assessor's evidence document for Employee's Rights & Responsibilities

Copy of a signed declaration from the training provider stating how the training hours for other types of 'off-the-job' training have been achieved.

Example: How the 'off-the-job' learning requirement will be met using the Nuclear Decommissioning Pathway 1a

- Level 2 Extended Certificate in Engineering [180 Training Hours]
- Level 1 Essential Skills Wales Maths (alternatively Key Skill Level 2 Application of Number) [45 Training Hours]
- Level 1 Essential Skills Wales English (alternatively Key Skill Level 2 Communication) [45 Training Hours]
- Level 1 Essential Skills Wales Information Communication Technology (ICT) (alternatively Key Skill Level 2 ICT) [45 Training Hours]
- Company Induction and Employee's Rights and Responsibilities (ERR) [40 Training Hours]
- Mentoring for the duration of the framework [40 Training Hours]
- **Total** [395 Training Hours]

Example: How the 'off-the-job' learning requirement will be met using Nuclear Decommissioning Pathway 1b

- Level 2 Diploma in Engineering [360 Training Hours]
- Level 1 Essential Skills Wales Maths (alternatively Key Skill Level 2 Application of Number) [45 Training Hours]
- Level 1 Essential Skills Wales English (alternatively Key Skill Level 2 Communication) [45 Training Hours]
- Level 1 Essential Skills Wales Information Communication Technology (ICT) (alternatively Key Skill Level 2 ICT) [45 Training Hours]
- Company Induction and Employee's Rights and Responsibilities (ERR) [40 Training Hours]
- Mentoring for the duration of the framework [40 Training Hours]
- **Total** [575 Training Hours]

Pathway – Radiation Protection:

Evidence:

Copy of a Certificate for the knowledge qualification –

- Level 2 NVQ Diploma in Radiation Protection (Combined Qualification) (QCF)

Copies of the required Certificates for Essential Skills Wales

Copy of the completed assessor’s evidence document for Employee’s Rights & Responsibilities

Copy of a signed declaration from the training provider stating how the training hours for other types of 'off-the-job' training have been achieved.

Example: How the 'off-the-job' learning requirement will be met using the Radiation Protection Pathway 2a

- Level 2 NVQ Diploma in Radiation Protection [114 'off-the-job' Training Hours]
- Level 1 Essential Skills Wales Maths (alternatively Key Skill Level 2 Application of Number) [45 Training Hours]
- Level 1 Essential Skills Wales English (alternatively Key Skill Level 2 Communication) [45 Training Hours]
- Level 1 Essential Skills Wales Information Communication Technology (ICT) (alternatively Key Skill Level 2 ICT) [45 Training Hours]
- Company Induction and Employee's Rights and Responsibilities (ERR) [40 Training Hours]
- Mentoring for the duration of the framework [40 Training Hours]
- **Total** [329 Training Hours]

Training hours delivered under an apprenticeship agreement may vary depending on the previous experience and attainment of the apprentice.

The amount of off-the-job training required to complete the apprenticeship under the apprenticeship agreement may then be reduced accordingly, provided the total number of off-the-job hours for this framework can be verified for apprenticeship certification.

Previous attainment

Where a learner enters an apprenticeship agreement having previously attained parts or all of the relevant qualifications, this prior learning needs to be recognised using either QCF credit transfer for achievement within the QCF or through recording of exceptions for certification learning outside of the QCF, for example Principal Learning qualifications.

For an apprentice who has already achieved the relevant qualifications, they must have been certificated within 5 years of applying for the Foundation Apprenticeship/ Apprenticeship Certificate.

Previous experience

Where a learner enters an apprenticeship agreement with previous work-related experience, this prior learning needs to be recognised. For further details please see QCF guidance on claiming credit. To count towards apprenticeship certification, previous experience must be recorded using the appropriate Awarding Organisation's QCF "Recognition of Prior Learning" procedures and the hours recorded may then count towards the off-the-job hours required to complete this apprenticeship.

For an apprentice with prior uncertificated learning experience, the off-the-job learning must have been acquired within 2 years of application for the Foundation Apprenticeship/ Apprenticeship Certificate or have been continuously employed in the relevant job role in the industry for a minimum duration of 3 years.

Off-the-job training needs to:

- Be planned, reviewed and evaluated jointly between the apprentice and a tutor, teacher, mentor or manager;
- Allow access as and when required by the apprentice either to a tutor, teacher, mentor or manager;
- Be delivered during contracted working hours;
- Be 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 and induction.

Off-the-job training must be formally recorded either in a diary, workbook, portfolio, or be verified by attendance records. The evidence needs to be checked and signed by the assessor and the employer.

On-the-job training

'On-the-job' training is defined as skills, knowledge and competence gained within normal working duties. For this framework the training hours for 'on-the-job' training is as follows:

Foundation Apprenticeship

Nuclear Decommissioning Pathway 1a: 254 Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Nuclear Decommissioning (QCF)

Nuclear Decommissioning Pathway 1b: 254 Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Nuclear Decommissioning (QCF)

Radiation Protection Pathway 2a: 48 Training Hours

PAA/VQ-SET Level 2 NVQ Diploma in Radiation Protection (QCF) (48 'on-the-job' Training

Hours)

How this requirement will be met

Foundation Apprenticeship

Pathway – Nuclear Decommissioning *or* Radiation Protection

Copy of a Certificate for the competence qualification –

- Level 2 NVQ Diploma in Nuclear Decommissioning(QCF) or
- Level 2 NVQ Diploma in Radiation Protection (QCF)

Copy of any certificates for any training courses attended

Copy of any completed assessor/ monitoring reports

Copy of any signed declaration from the training provider stating how the training hours for other types of 'on-the-job' training has been achieved.

Wider key skills assessment and recognition (Wales)

Improving own learning and performance

The wider key skill of "Improving own learning and performance", whilst not assessed as part of this framework, is embedded within the learning undertaken in the mandatory units of the competence qualification.

Working with others

The wider key skill of "Working with others", whilst not assessed as part of this framework, is embedded within the learning undertaken in the mandatory units of the competence qualification.

Problem solving

The wider key skill of "Problem solving", whilst not assessed as part of this framework, is embedded within the learning undertaken in the mandatory units of the competence qualification.

Additional employer requirements

It would be expected that anyone new entering the nuclear industry would complete the:

This is not a mandatory requirement for the competition certificate and will not receive any additional funding.

The Triple Bar is three short courses (BCIS, BNIB & BNIC) which have been designed with industry involvement to prepare individuals requiring unescorted access to nuclear sites. All of the courses within the Triple Bar suite have been developed to Nuclear Industry Standards and can be recorded on the Nuclear Skills Passport.

The training is focused at a fundamental level to introduce the requirements for compliance, nuclear awareness and industry behaviours for working in the nuclear industry. Sites may rest your knowledge upon arrival onsite depending on the length of time from your completion of these courses to ensure knowledge retention.

For more information please see <https://www.nuclear.nsacademy.co.uk>

apprenticeship
FRAMEWORKS ONLINE

For more information visit
www.afo.sscalliance.org