

apprenticeship FRAMEWORK

Land-based Engineering non-statutory (Wales)

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Framework summary

Land-based Engineering non-statutory

Land-based Engineering

Pathways for this framework at level 2 include:

Pathway 1: Land-based Engineering

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 Diploma in Work-based Land-based Engineering

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Land-based Engineering non-statutory

Land-based Engineering

Pathways for this framework at level 3 include:

Pathway 1: Land-based Engineering

Competence qualifications available to this pathway:

N/A

Knowledge qualifications available to this pathway:

N/A

Combined qualifications available to this pathway:

B1 - Level 3 Diploma in Work-based Land-based Engineering

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Framework information

Information on the Publishing Authority for this framework:

Lantra

The Apprenticeship sector for occupations in environmental and land-based.

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Short description

The Land-based Engineering Apprenticeship offers a Level 2 and Level 3 entry route into the industry and provides the skills and knowledge required to carry out their job role and support the future progression within the industry.

The Diploma in Work-based Land-based Engineering included within the framework has routes which apprentices may select depending on the area of employment; these are reflected in the range of jobs such as: service technician, sports/groundcare technician, demonstrator, independent technician or workshop supervisor/manager.

Following successful completion of the Apprenticeship, apprentices can progress within land-based engineering in Further/Higher Education or through other vocational courses.

Contact information

Proposer of this framework

The land-based engineering industry group which includes employers and trade associations such as the British Agricultural and Garden Machinery Association (BAGMA), Institute of Agricultural Engineers (IAgrE), Agriculture Engineering Association (AEA), John Deere, AGCO, CLAAS UK, JCB, CNH and a number of independent businesses/dealers. This framework is published by Lantra on a non-statutory basis prior to the designation of Issuing Authorities for Wales.

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Purpose of this framework

Summary of the purpose of the framework

Land-based engineering is a broad and highly specialised industry working with a vast array of machines. Employees are expected to work on a wide range of specialist vehicles and machines used in agriculture, forestry, horticulture, groundcare and fixed plant. An important role for employees is keeping equipment in good working order through planned maintenance, as well as carrying out any diagnostic and repair work when required.

The land-based engineering industry comprises of the following areas:

- Agricultural machinery - including tractors, harvest, cultivation and crop protection machinery
- Groundcare machinery - including garden, sports turf and local grounds maintenance machinery
- Forestry/arboriculture machinery - including chainsaws and chippers
- Fixed machinery - including grain/crop processing and milking equipment.

Often when qualified, workers are called upon by businesses to repair machines which may involve them working alone in the field, this requires good knowledge of health and safety legislation and working alone policies, which learners will gain through the Apprenticeship in Land-based Engineering.

Small and medium sized businesses dominate the land-based and environmental sector with 80% of the land-based engineering businesses employing fewer than ten people, which emphasises the need for the workforce to be highly skilled. The Apprenticeship offers businesses the opportunity to ensure that all their staff have the required skills and knowledge to meet the challenges of the 21st century.

Research carried out by Lantra in 2010 revealed that the land-based engineering industry in Wales represents 1% of the businesses (140) within the land-based and environmental sector and 1% of the employment with 900 employees (total for the sector is 90,750). However, land-based engineering is a valuable industry as it provides support for several other industries within the land-based and environmental sector. The technology used within these industries and others evolve continuously and therefore it is imperative that qualifications are kept up-to-date, reflect the wide diversity of equipment and machinery used within the land-based and environmental sector and are reflective of industry needs. The research also showed that

the industry has an ageing workforce with 56% of the employees aged 40 or over. Therefore the Apprenticeship entry and progression opportunities aim to encourage young learners into the land-based engineering industry by offering development opportunities to ensure the future of the skills and knowledge within the industry.

The land-based engineering industry suggests that the skills gaps are in specialist technical knowledge, computer literacy, customer care and basic technical skills. The Apprenticeship has taken this on board with the revised framework including these skills within the Diploma in Work-based Land-based Engineering and other areas of the Apprenticeship.

The land-based engineering industry in Wales values the Apprenticeship as an entry route into the sector. Having said this, numbers of completions are low and have declined recently due to Welsh providers delivering full-time options as an alternative. However, Lantra is working with Welsh providers and employers to establish shared training to encourage the uptake of Apprenticeships in Wales (the completions from the past three years are listed below).

2008/2009

- Level 2 – 9
- Level 3 – 9
- Total – 18

2007/2008

- Level 2 – 22
- Level 3 – 4
- Total – 26

2006/2007

- Level 2 – 22
- Level 3 – 8
- Total – 30

The framework also contributes to meeting the skills priorities in Wales by:

- Providing flexible access to high quality (Level 2 and Level 3) skills programmes for land-based engineering
- Incorporating skills to improve the levels of general literacy and numeracy in Wales
- Using technical and competence qualifications, to help employers' businesses grow
- Developing apprentices' employability skills, making them more attractive to all employers whatever career they choose
- Providing a career pathway into jobs and training at intermediate and higher levels and

provide the skills that the economy needs to grow.

During the review of this Apprenticeship, Lantra involved the Welsh members of the industry and virtual group which accounts for ten individuals and trade associations such as British Agricultural and Garden Machinery Association (BAGMA), Institute of Agricultural Engineers (IAgrE), Agriculture Engineering Association (AEA), John Deere, AGCO, CLAAS UK, JCB, CNH and a number of independent businesses/dealers. By involving trade associations and independent businesses we ensure that the Apprenticeship frameworks are reflective of the current and future needs of the industry.

This important entry route into the industry has been highlighted by employers in the Industry Action Plan, which states the need to prioritise and increase the awareness and uptake of Land-based Engineering Apprenticeships.

The land-based engineering framework at both Levels 2 and 3 reflect the job roles within the industries and allows apprentices to take units in agricultural, forestry/arboriculture, groundcare or fixed plant and storage depending on the business they are working in. The types of jobs available include:

- Job roles at Level 2 may include: sports and groundcare technician or service technician.
- Job roles at Level 3 may include: demonstrator, independent technician or workshop supervisor.

Further information on the land-based engineering industry can be found at: www.lantra.co.uk.

Aims and objectives of this framework (Wales)

The aim of the Land-based Engineering Foundation Apprenticeship and Apprenticeship is to build on the predecessor by including updated qualifications that are flexible and reflective of the skills needs of the industry, attract new entrants into the land-based engineering industry and provide progression opportunities to move towards higher level jobs.

Objectives of the framework are to:

1. Provide an alternative entry route into the land-based sector in Wales
2. Increase the uptake of the Land-based Engineering Level 2 Foundation Apprenticeship and the Level 3 Apprenticeship in Wales over the next three years
3. Provide career progression information from entry to higher level jobs.

Further careers information can be found on Lantra's website www.lantra.co.uk/careers.

Entry conditions for this framework

If you are interested in working in Land-based Engineering, there are many different types of jobs, for example working on a range of vehicles and machines used in farming or specialist vehicles and machines used in horticulture, ground care and sports facilities. By taking an apprenticeship in Land-based Engineering you will be able to work towards one of these jobs.

Entry requirements for the Foundation Apprenticeship

There are no specific entry requirements for the Level 2 Foundation Apprenticeship in Land-based Engineering, however, there are qualifications, courses and experience that will help learners understand the sector prior to starting:

- Level 1 Certificate in Land-based Studies
- Level 1 BTEC Award/Certificate in Land-based Studies
- Level 1 Diploma in Work-based Land-based Operations
- GCSEs/A Levels
- Have previously worked in, or are currently working within, the industry
- Essential/Key skills.

Learners who have completed the Welsh Bacculaureate may have completed units or short courses which will provide underpinning knowledge towards the Foundation Apprenticeship, this will be assessed during an initial assessment allowing RPL where appropriate.

Progression opportunities onto the Land-based Engineering Foundation Apprenticeship also exist for adult learners who have experience within the land-based engineering industry or who are looking for a career change.

Entry requirements for the Apprenticeship

The land-based engineering industry wants the entry requirements for the Apprenticeship to be flexible, so therefore has suggested that one of the following should be completed:

- Level 2 Diploma in Land-based Technology
- Level 2 Diploma in Work-based Land-based Engineering
- Level 2 NVQ in Land-based Service Engineering
- Practical experience within the industry
- 3 GCSEs (A-C)/A levels.

Learners who have completed the Welsh Bacculaureate may have completed units or short courses which will provide underpinning knowledge towards the Apprenticeship, this will be assessed during an initial assessment allowing RPL where appropriate.

Progression opportunities onto the Land-based Engineering Apprenticeship also exist for adult learners who have experience within the land-based engineering industry or who are looking for a career change.

RULES TO AVOID REPEATING QUALIFICATIONS

Processes exist to make sure that applicants with prior knowledge, qualifications and experience 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 the on and off the job training section for guidance about prior attainment and achievement.

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.

Essential Skills Wales

If applicants already have GCSEs in English, Maths or ICT they still have to do the Essential Skills Wales at the relevant level as these are new qualifications and proxies do not exist.

Up to the 31 August 2011, if applicants already have achieved Key Skills at the relevant level, they will not have to do the relevant Essential Skills Wales, however, apprentices can be encouraged to complete ESW at a higher level if appropriate.

Competence qualifications

If applicants already have the Level 2/3 competence qualifications for the Apprenticeship they do not have to repeat this qualification, however, this qualification must have been achieved within five years of applying for the apprenticeship certificate and they will still have to demonstrate competence in the workplace.

Prior experience

Applicants already working in the sector will be able to have their prior experience 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 programmes to meet individual

needs, recognising prior qualifications and experience.

Processes exist to make sure that applicants with prior knowledge, qualifications and experience 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.

Level 2

Title for this framework at level 2

Land-based Engineering

Pathways for this framework at level 2

Pathway 1: Land-based Engineering

Level 2, Pathway 1: Land-based Engineering

Description of this pathway

Equipment used in agriculture, horticulture, sports and amenity forestry and fixed plant. A minimum of 127 credits.

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

No additional pathway entry requirements.

Job title(s)	Job role(s)
Service Technician	Service technicians work on a range of specialist vehicles and machines used in farming, forestry and horticultural businesses. They play an important role in keeping equipment in good working order through planned maintenance, as well as carrying out diagnostic and repair work when required.
Sports/Groundcare Technician	Sports groundcare technicians work on a wide range of specialist vehicles and machines used in horticulture, groundcare and sports facilities. They will help keep equipment in good working order through planned maintenance, as well as carrying out any diagnostic and repair work when required.

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 Diploma in Work-based Land-based Engineering					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
B1a	501/0302/7	NPTC/C&G	109	893	N/A

Notes on competence and knowledge qualifications (if any)

There is one qualification, Level 2 Diploma in Work-based Land-based Engineering, which includes both competence and knowledge.

The competence and knowledge elements will be achieved through completion of the mandatory and optional units listed within the awarding organisation's (NPTC/C&G) guidance and must total a minimum of 109 credits, 10 of which will form the knowledge element and be assessed via independent methods.

The competence units will be separately assessed to the knowledge units listed below.

The choice of knowledge units will depend on the role and workplace the apprentice is working in and will need to be agreed with the apprentice, employer and provider at the start of the programme.

Knowledge units:

- Monitor and maintain health and safety within land-based engineering (7 credits)
- Land-based engineering operations – applying mechanical principles (5 credits)
- Land-based engineering operations – understand how to use, service and maintain tools and equipment (5 credits).

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	1	6
Application of numbers	1	6
IT	1	6

Progression routes into and from this pathway

The Level 2 Foundation Apprenticeship in Land-based Engineering is valued by the land-based engineering industry as an entry route into the industry.

Progression onto the Land-based Engineering Foundation Apprenticeship

There are no specific entry requirements to enter the Land-based Engineering Foundation Apprenticeship, however, there are qualifications or experience that will help learners prior to starting:

- Level 1 Certificate in Land-based Studies
- Level 1 BTEC Award/Certificate in Land-based Studies
- Level 1 Diploma in Work-based Land-based Operations
- GCSEs/A Levels
- Have previously worked in, or are currently working within, the industry
- Essential/Key skills.

Learners who have completed the Welsh Baccalaureate may have completed units or short courses which will provide underpinning knowledge towards the Foundation Apprenticeship, this will be assessed during an initial assessment allowing RPL where appropriate.

Progression opportunities within the Land-based Engineering Foundation Apprenticeship also exist for adult learners who have experience within the land-based engineering industry or who are looking for a career change.

Progression from a Level 2 Foundation Apprenticeship

Apprentices successfully completing the Foundation Apprenticeship have opportunities to

progress within the industry by progressing to the Apprenticeship in Land-based Engineering or other Further Education courses such as:

- Level 3 Certificate/Subsidiary Diploma/Diploma/Extended Diplomas in Land-based Technology
- Level 3 BTEC Award in Agriculture
- Level 3 Certificate in Work-based Agriculture
- Level 3 Diploma in Work-based Agriculture
- Level 3 BTEC Diploma/Extended Diploma in Agriculture.

Typical jobs apprentices will be able to progress onto on completion of the Level 2 Foundation Apprenticeship will depend on the qualifications and experience gained during the Foundation Apprenticeship but could include: service technician or parts person.

For apprentices who wish to continue their development of skills and qualifications beyond Level 3, opportunities exist to progress further into Higher Education with Foundation Degrees/Degrees. These are explained in the progression from the Apprenticeship section.

Further information on careers in the land-based engineering industry including job profiles, progression maps and case studies can be found at www.lantra.co.uk/careers.

Delivery and assessment of employee rights and responsibilities

Employee Rights and Responsibilities (ERR) within the Foundation Apprenticeship in Land-based Engineering

Within the Foundation Apprenticeship in Land-based Engineering there are two options for apprentices to choose to gain the ERR element of this framework. This gives apprentices the flexibility to complete the ERR in a way that is most appropriate to them. These two options will be explained to apprentices at the start of their programme during induction.

The two options are:

1. Lantra's Land-based Engineering ERR workbook contains a number of tasks with short answer questions covering the nine outcomes listed below, which learners can complete at their own pace. The workbook can be found on Lantra's website www.lantra.co.uk/ERR.

Evidence of achievement of the ERR workbook must be sent to Lantra before a Foundation Apprenticeship Completion Certificate can be issued. This must be the sign off sheet at the back of the book which must be signed by the apprentice, employer and training provider.

Or

2. Unit J/602/5253 - Principles of employment rights and responsibilities in the land-based industries (2 credits).

Currently this is an accredited unit offered by British Horseracing Education and Standards Trust (BHEST). Those who complete the ERR unit will need to evidence their achievement with a completion certificate from the awarding organisation.

There are nine national outcomes/standards that all learners must know and/or understand:

1. Knows and understands the range of employer and employee statutory rights and responsibilities under employment law. This should cover the apprentice's rights and responsibilities under the Employment Rights Act 1996, Equality Act 2010 and health and safety legislation, together with the responsibilities and duties of employers
2. Knows and understands the procedures and documentation in their organisation, which recognise and protect their relationship with their employer. Health and safety and

equality and diversity training must be an integral part of the apprentice's learning programme

3. Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities. Details of Access to Work and Additional Learning Support must be included in the programme
4. Understands the role played by their occupation within their organisation and industry
5. Has an informed view of the types of career pathways that are open to them
6. Knows the types of representative bodies and understands their relevance to their skill, trade or occupation, and their main roles and responsibilities
7. Knows where and how to get information and advice on their industry, occupation, training and career
8. Can describe and work within their organisation's principles of conduct and codes of practice
9. Recognises and can form a view on issues of public concern that affect their organisation and industry.

Level 3

Title for this framework at level 3

Land-based Engineering

Pathways for this framework at level 3

Pathway 1: Land-based Engineering

Level 3, Pathway 1: Land-based Engineering

Description of this pathway

Equipment used in agriculture, horticulture, sports and amenity forestry and fixed plant. A minimum of 78 credits.

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

No additional pathway entry requirements.

Job title(s)	Job role(s)
Demonstrator	A demonstrator must be able to sell, install and use new and existing equipment. They have good machine operational skills and a good understanding of all products. They can be a specialist in one or two products such as green crop, grass or tractors.
Independent Technician	Independent technicians are self-employed and are usually very skilled in a range of equipment. It is often necessary to go back into industry to refresh skills and stay up-to-date with the latest technology and equipment.
Workshop Supervisor	A workshop supervisor will have a good understanding of products and services including parts. They will support the workshop manager with daily activities and act as deputy in their absence. This role will be to ensure all customers requirements are met and resolve any issues they may have.

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

B1 - Level 3 Diploma in Work-based Land-based Engineering					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
B1a	501/0399/4	NPTC/C&G	60	488	N/A

Notes on competence and knowledge qualifications (if any)

There is one qualification, Level 3 Diploma in Work-based Land-based Engineering, which includes both competence and knowledge.

The competence and knowledge elements will be achieved through completion of the mandatory and optional units listed within the awarding organisation's (NPTC/C&G) guidance and must total a minimum of 60 credits, 10 of which will form the knowledge element and be assessed via independent methods.

The competence units will be separately assessed to the knowledge units listed below.

The choice of knowledge units will depend on the role and workplace the apprentice is working in and will need to be agreed with the apprentice, employer and provider at the start of the programme.

Knowledge units:

- Recognise and reduce risks in the land-based engineering work area (4 credits)
- Land-based engineering operation - use calculations (5 credits)
- Maintain electronic control and monitoring systems on land-based equipment (10 credits).

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

The land-based engineering industry values the Level 3 Apprenticeship as an entry/progression route into the industry. From the Level 2 Foundation Apprenticeship there is direct progression onto Level 3, or learners may progress straight onto the Apprenticeship from another programme.

Progression onto the Apprenticeship

The Land-based Engineering industry wants the entry requirements for the Apprenticeship to be flexible, so therefore has suggested that one of the following should be completed:

- Level 2 Certificate/Extended Certificate/Diploma in Land-based Technology
- Level 2 Diploma in Work-based Land-based Engineering
- Level 2 NVQ in Land-based Service Engineering
- Relevant experience and practical skills within the industry
- 3 GCSEs (A-C)/A levels.

Learners who have completed the Welsh Baccalaureate may have completed units or short courses which will provide underpinning knowledge towards the Foundation Apprenticeship, this will be assessed during an initial assessment allowing APL where appropriate.

Progression opportunities onto the Land-based Engineering Apprenticeship also exist for adult learners who have experience within the land-based engineering industry or who are looking for a career change.

Progression from the Apprenticeship

Apprentices successfully completing the Apprenticeship have opportunities to progress within

the industry by progressing to Higher Education courses such as a HNC/D, Foundation Degree or Degree (BSc). Examples of courses available across the UK include:

- Engineering: land-based and construction engineering
- Engineering: machinery dealership management
- Agricultural engineering
- Agriculture and mechanisation
- Agricultural technology
- People or financial management.

For apprentices who wish to continue their development or skills and qualifications beyond Degree level, opportunities exist to progress further in Higher Education with courses such as a Master's Degree (MSc), including:

- MSc Agricultural and Environmental Engineering
- MSc Mechanical Engineering and Management

Some useful websites to visit regarding Higher Education are www.ucas.co.uk, or www.prospects.ac.uk, both of these have information about courses and providers along with specific information on entry requirements.

Apprentices looking to progress in their employment from the Level 3 Apprenticeship may be able to work towards senior, technical and managerial positions. Progression will be dependent on the qualifications and experience an individual possesses, as achievement alone of the Level 3 Apprenticeship does not guarantee entry to these opportunities.

Further information on careers in the land-based engineering industry including job profiles, progression maps and case studies can be found at www.lantra.co.uk/careers.

UCAS points for this pathway: N/A

Delivery and assessment of employee rights and responsibilities

Employee Rights and Responsibilities (ERR) within the Apprenticeship in Land-based Engineering

Within the Apprenticeship in Land-based Engineering there are two options for apprentices to choose to gain the ERR element of this framework. This gives apprentices the flexibility to complete the ERR in a way that is most appropriate to them. These two options will be explained to apprentices at the start of their programme during induction.

The two options are:

1. Lantra's Land-based Engineering ERR workbook contains a number of tasks with short answer questions covering the nine outcomes listed below, which learners can complete at their own pace. The workbook can be found on Lantra's website www.lantra.co.uk/ERR.

Evidence of achievement of the ERR workbook must be sent to Lantra before an Apprenticeship Completion Certificate can be issued. This must be the sign off sheet at the back of the book which must be signed by the apprentice, employer and training provider.

Or

2. Unit J/602/5253 - Principles of employment rights and responsibilities in the land-based industries (2 credits).

Currently this is an accredited unit offered by British Horseracing Education and Standards Trust (BHEST). Those who complete the ERR unit will need to evidence their achievement with a completion certificate from the awarding organisation.

Apprentices who have undertaken a Foundation Apprenticeship at Level 2 may have already completed the ERR workbook or they may have undertaken an accredited unit. These apprentices will not be required to repeat this section but they will be required to provide evidence of completion at the time of certification of the Apprenticeship.

There are nine national outcomes/standards that all learners must know and/or understand:

1. Knows and understands the range of employer and employee statutory rights and responsibilities under employment law. This should cover the apprentice's rights and responsibilities under the Employment Rights Act 1996, Equality Act 2010 and health and safety legislation, together with the responsibilities and duties of employers
2. Knows and understands the procedures and documentation in their organisation, which recognise and protect their relationship with their employer. Health and safety and equality and diversity training must be an integral part of the apprentice's learning programme
3. Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities. Details of Access to Work and Additional Learning Support must be included in the programme
4. Understands the role played by their occupation within their organisation and industry
5. Has an informed view of the types of career pathways that are open to them
6. Knows the types of representative bodies and understands their relevance to their skill, trade or occupation, and their main roles and responsibilities
7. Knows where and how to get information and advice on their industry, occupation, training and career
8. Can describe and work within their organisation's principles of conduct and codes of practice
9. Recognises and can form a view on issues of public concern that affect their organisation and industry.

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

How equality and diversity will be met

Land-based engineering industry

The land-based engineering industry employees are mainly males (77%), which is significantly higher than the sector average of 68% (UK) male employees and Wales' average at 71%. Whilst the industry doesn't preclude females from working in the sector, it is suggested that the imbalance is due to an out-dated perception of land-based engineering employment as traditionally a male dominated industry despite many roles in land-based engineering being carried out by females. It is interesting to note that Further Education enrolments onto Land-based Engineering related learning programmes are also mainly male at an average of 98% compared with work-based learning enrolments 100%.

There are wide range of hands-on roles for people of all ages and abilities together with an increasing need for skilled managerial, high-tech and specialist people. Lantra's research predicts that 110,000 people will be needed over the next decade across the land-based sector.

The industry is diverse and made up of dealerships, manufacturers, the ground care sector, forestry and garden machinery dealerships and manufacturers. There is a wide range of opportunities for land-based engineers, including exciting and rewarding careers in design development, manufacturing, field engineering, service engineering, environmental control, mechanisation and sales and marketing.

Care should be taken by providers and employers that unfair discrimination does not occur.

Apprenticeships are seen as an important route to encourage and facilitate a greater diversity of individuals into the industry. Training providers MUST comply with the Equality Act 2010 to ensure that applicants are not discriminated against in terms of entry to the industry, using the nine legally protected characteristics of:

1. Age
2. Disability
3. Gender
4. Gender reassignment
5. Marriage and civil partnerships
6. Pregnancy and maternity
7. Race
8. Religion and Belief
9. Sexual orientation

Resolutions and further work

The units within the Diploma in Work-based Land-based Engineering have been written in collaboration with partner awarding organisations to ensure that they are free from bias, accessible to all apprentices and are applicable to a wide range of roles and businesses within land-based engineering. Because of the diverse nature of the land-based engineering sector the Diploma in Work-based Land-based Engineering has been developed from these units to allow maximum flexibility and choice within the rules of combination.

Lantra will work with its Land-based Engineering Industry Group to promote the need for skilled managerial, high-tech and specialist people. This will also take into account the need to increase female and ethnic participation in the industry. Activities will include:

- Increasing the awareness of the Land-based Engineering Level 2 and 3 Apprenticeship with specific promotions, in particular focusing on under-represented groups such as females
- Increasing marketing and communications highlighting the opportunities to a wide range of careers within and related to the sector
- Using Lantra's careers web pages to inform careers advisors and apprentices of the opportunities available in the industry.

On and off the job training (Wales)

Summary of on- and off-the-job training

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

On-the-job training is defined as skills, knowledge and competence gained within normal work duties.

Total learning hours

Foundation Apprenticeship (Level 2)

- The total amount of learning hours which includes both on and off the job training for the Land-based Engineering Foundation Apprenticeship is 1208 over a 24 month period.

Apprenticeship (Level 3)

- The total amount of learning hours which includes both on and off the job training for the Land-based Engineering Apprenticeship is 793 over a 15 month period.

Off-the-job training

Off-the-job training

For this framework the amount of off-the-job training is as follows:

Foundation Apprenticeship (Level 2)

- Land-based Engineering Foundation Apprenticeship - a minimum of 734 off-the-job training hours must be delivered throughout the 24 months duration of the programme.

Apprenticeship (Level 3)

- Land-based Engineering Apprenticeship - a minimum of 483 off-the-job training hours must be delivered throughout the 15 months duration of the programme.

How this requirement will be met

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 the Qualifications and Credit Framework (QCF) credit transfer for achievements within the QCF, or through recording of exemptions for certificated learning outside of the QCF, for example Principal Learning Qualifications.

For learners who have already achieved the relevant qualifications, they must have been certificated within five years of applying for the Apprenticeship Certificate.

Previous experience

Where a learner enters an Apprenticeship agreement with previous work-related experience, this prior learning needs to be recognised (see QCF guidance on Claiming Credit for further details). 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 the Apprenticeship.

For learners with prior uncertificated learning experience, the off-the-job learning must have been acquired within five years of application for the Apprenticeship Certificate or have been continuously employed in the relevant job role in the industry for five 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.

Examples of off-the-job training for the Land-based Engineering Apprenticeship are:

- Knowledge of different agricultural, horticultural or forestry and other land-based equipment
- Understanding health and safety requirements with regards to working with large machinery/equipment and lone working
- Essential Skills in Communication, Application of Number and Information and Communication Technology
- First aid training
- Taught sessions contributing to employee rights and responsibilities knowledge
- Induction where activities are covered away from normal work duties.

Evidence of off-the-job training

- Level 2/3 Knowledge based units
- Level 1/2 Essential Skills
- Employee rights and responsibilities
- Induction.

Off-the-job training must be recorded in a diary, workbook, portfolio, attendance records, job cards, draft invoices and timesheets. This evidence needs to be checked and signed by the assessor and employer.

A completed sign off sheet from the provider that the appropriate off-the-job training has been completed, which is available on Lantra's website www.lantra.co.uk/forms, needs to be sent to Lantra with a completed certification request.

On-the-job training

On-the-job training

For this framework the amount of on-the-job training is as follows:

Foundation Apprenticeship (Level 2)

- Land-based Engineering Foundation Apprenticeship – a minimum of 474 on-the-job training hours must be delivered throughout the 24 months duration of the programme.

Apprenticeship (Level 3)

- Land-based Engineering Apprenticeship – a minimum of 310 on-the-job training hours must be delivered throughout the 15 months duration of the programme

How this requirement will be met

These hours 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 competencies or knowledge, this prior learning needs to be recognised and documented using the relevant QCF credit transfer, QCF exemption or RPL procedures (as off-the-job above). The amount of on-the-job training required to complete the Apprenticeship under the Apprenticeship agreement may then be reduced accordingly, provided the total number of on-the-job hours for this framework can be verified for Apprenticeship certification.

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 towards the on-the-job framework total through prior learning acquired from previous full-time education, employment or other vocational programmes, then the apprentice's learning programme should include 'customisation' allowing for RPL. 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 or alternative unit(s) from QCF qualifications, or relevant units recognised as Quality Assured Lifelong Learning (QALL) through a Credit and Qualifications Framework Wales (CQFW) recognised body, or follow Essential Skills at a level higher than that specified in the framework, include one or more Wider Key Skills or other competency-based qualifications/units relevant to the workplace.

For apprentices who have already achieved the relevant qualifications, they must have been certificated within five years from the date of application for the Apprenticeship Certificate or have been continuously employed in the industry for five years.

Job roles within land-based engineering require a thorough level of technical competence and knowledge, which will be undertaken through work-based training, practice and experience.

Examples of on-the-job activities that a learner will be focusing on within the workplace for the Land-based Engineering Apprenticeship are:

- Safe use of equipment and machines
- Environmental awareness
- Employability skills
- Team working and communications
- Task specific workplace instructions or team briefings
- Taught sessions by the workplace line manager/instructor as opposed to formal planned taught sessions off-the-job on employee rights and responsibilities knowledge
- Induction where activities are covered within normal work duties.

Evidence of on-the-job training

- Level 2/3 Diploma in Work-based Land-based Engineering
- Level 1/2 Essential Skills in Communication, Application of Number and Information Communication Technology.

On-the-job training must be recorded in a diary, workbook, portfolio, attendance records, job cards, draft invoices and timesheets. This evidence needs to be checked and signed by the assessor and employer.

A completed sign off sheet from the provider that the appropriate on-the-job training has been completed, which is available on Lantra's website www.lantra.co.uk/forms, needs to be sent to Lantra with a completed certification request.

Wider key skills assessment and recognition (Wales)

Improving own learning and performance

Industry felt that improving own learning and performance is sufficiently covered by the planning, monitoring and evaluating of the apprentices' progress within the review carried out with their supervisor/tutor.

However, providers and apprentices are encouraged to record where and when these Wider Key Skills are being used so that evidence can be gathered to allow apprentices to claim RPL for these skills in the future.

Working with others

Industry felt that working with others is sufficiently covered by the whole Apprenticeship programme as apprentices will often be working as part of a team in their job role.

However, providers and apprentices are encouraged to record where and when these Wider Key Skills are being used so that evidence can be gathered to allow apprentices to claim RPL for these skills in the future.

Problem solving

Industry felt that problem solving is sufficiently covered by the Diploma in Work-based Land-based Engineering qualification as apprentices will be resolving problems as part of their learning and work.

However, providers and apprentices are encouraged to record where and when these Wider Key Skills are being used so that evidence can be gathered to allow apprentices to claim RPL for these skills in the future.

Additional employer requirements

For both the Foundation Apprenticeship and Apprenticeship

All learners are advised to complete at least one of the following, although it is not a requirement of the Specification of Apprenticeship Standards for Wales (SASW). The additional employer requirements will enhance and facilitate progression within the land-based engineering industry:

- Emergency First Aid (one-day course approved by Health and Safety Executive)
- Basic Tractor Driving
- Safe Use of Abrasive Wheel Machines
- Safe Use of Pedestrian Controlled Two-Wheeled Tractors
- Safe Use of Turf Maintenance Equipment
- All-Terrain Vehicle Handling
- Approve Manufacturers' Technical Courses.

apprenticeship
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