



Level 3 Award in
Utility Arboriculture – Surveyor

Qualification Specification

Version 1

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Qualification Specification

Lantra Awards

Level 3 Award in Utility Arboriculture – Surveyor

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1 Why Has This Qualification Been Developed?

The Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor has been developed in direct response to a request from the Arboricultural Association’s Utility Arboriculture Group. This followed amendments to the National Occupational Standards (NOS). It was identified that it would be desirable to have regulated qualifications for this aspect of tree work to replace the non-regulated assessed training that was previously available.

The Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor is based on the NOS and takes into account the requirements of the Electricity Networks Association’s (ENA) Engineering Recommendations G55 and the Network Rail Rule Book (GE/RT8000).

Learners may undertake training from a variety of sources. However, to achieve these qualifications, they must be assessed against all of the learning outcomes and assessment criteria set out within this specification.

This qualification specification provides information for approved Lantra provider employees and freelance assessors involved in the planning, delivery and assessment of the Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor.

2 Who is the Qualification For?

This qualification has been developed for individuals carrying out roles in surveying and controlling vegetation in proximity to linear utilities, particularly in the utility arboricultural sector. They provide the opportunity to achieve a recognised national qualification that reflects the national standards for the role(s) they perform. This qualification is suitable for those entering work as well as those who have established themselves in the arboricultural sector and are seeking to develop their careers to include working in proximity to utilities.

The qualification is designed to enable learners to develop the knowledge, understanding and skills to support their role(s) and develop their career in the management of vegetation in proximity to utilities. It also provides an opportunity for learners to obtain recognised certification, enabling them to work within the utility arboriculture sector of the industry. The qualification will enhance the ability of personnel to work safely, effectively and efficiently in the workplace, reducing unnecessary risks to themselves and others.

This qualification is available for learners aged 16 and over.

2.1 Prerequisites

Entry for the Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor is available to any individual who is capable of achieving the required standard.

Provider staff should understand the demands of this qualification and match learners based on their individual capabilities and future progression requirements.

This qualification has been developed to promote equal opportunities by eliminating any avoidable barriers that have the potential to restrict access or progression.

Those seeking to take the Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor will be required to have the Level 2 Award in Utility Arboriculture – Basic Electrical Knowledge qualification, or a comparable certification.

Qualifications		
Qualification title	Entry code	Purpose
Level 2 Award in Utility Arboriculture – Basic Electrical Knowledge.	603/2048/5	This is a prerequisite for the Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor, as it establishes a knowledge of electrical networks.

3 What Does This Qualification Cover?

Learners undertaking this qualification will be able to demonstrate their knowledge of safe working in proximity to utilities, specifically regarding tree work.

The qualification aims to assess the learner's knowledge and understanding of:

- The regulations and industry codes of practice for working in proximity to linear utilities
- Features of linear utilities
- Hazards and risks associated with working in proximity to linear utilities
- Personal safety
- Safe working practices in proximity to linear utilities
- Factors to consider when using specialist safety equipment
- How to deal with incidents.

Following regulatory requirements for qualifications to have a distinct purpose, this qualification is identified and approved by Ofqual to have the following function:

- Prepare for employment
- Confirm occupational competence and/or licence to practice.

This qualification prepares learners for employment within the utility arboriculture sector. The Level 3 Award in Utility Arboriculture – Surveyor meets the requirements set by the industry for all those seeking to work as a surveyor on a linear utility site.

3.1 Progression routes

This qualification forms part of a wider Lantra Awards offer. The table below indicates where there are opportunities for learners to progress via accredited training and, where applicable, regulated qualifications.

Training		
Training title	Entry code	Purpose
Professional Tree Inspection	ATID002	This is an assessed course which enables those who are already undertaking tree inspections to further develop their skills.

4 Qualification Overview

Where to look for further details

Qualification title	Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor	Ofqual's Register of Regulatory Qualifications: http://register.ofqual.gov.uk/
Qualification number	603/3100/8	
Qualification aim	The aim of this qualification is to ensure that the learner has the knowledge and understanding to carry out vegetation surveys and inspections in proximity to linear utilities.	
Qualification purpose	This qualification will be a licence to practice for those wishing to undertake vegetation management surveys in proximity to linear utilities. The qualification will ensure that learners have sufficient knowledge and understanding of the hazards associated with this working environment.	
Qualification start date	1 March 2018	
Level	3	
Credits	4	
GLH	26 hours	
TQT	44 hours	
Quartz ID numbers	Level 3 Award in Utility Arboriculture – Surveyor (Electrical Networks Pathway) Course ID: 5885 Level 3 Award in Utility Arboriculture – Surveyor (Railway Networks Pathway) Course ID: 5902	
Unit numbers and titles	K/616/1911 - Tree Species Recognition, Growth Characteristics and Associated Hazards R/616/9517 - Managing Vegetation in Proximity to the Utility Infrastructure Y/616/9518 - Environment and Wildlife for Utility Vegetation Management D/616/9519 - Surveying for Utility Arboriculture M/616/9525 - Electrical Networks T/616/9526 - Railway Networks D/616/9522 - Tree Inspection for Utility Arboriculture	Page 13
Qualification structure	Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor qualification consists of four mandatory units and two mandatory optional units to give two distinct pathways within the qualification and one optional additional unit. Learners must complete all the	

	mandatory units and at least one mandatory optional unit in order to gain the qualification.			
Age group	Pre-16	16–18	18+	19+
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entry requirements	Learners must be able to read and interpret information that is provided in English. It is recommended that learners have a valid Emergency First Aid at Work certificate.			
Prerequisites	Level 2 Award in Utility Arboriculture – Basic Electrical Knowledge			
Recognition of prior learning	Learners progressing from the Level 3 Award in Utility Arboriculture – Arboricultural Activities may have completed unit K/616/1911 – Tree Species Recognition, Growth Characteristics and Associated Hazards			
Assessment methodologies	<ul style="list-style-type: none"> • Practical observation of assessment activities • Verbal questioning • Professional discussion. 			
Assessment model	These qualifications are externally assessed by a Lantra Awards assessor. An EQA will quality assure the assessor and the assessment decision to validate the outcome.			
Grading	Pass/fail			
Is there a skills card available?	Yes			Guidance Handbook for Providers
Fees	Registration and certification fees can be found in the product directory. Prices are subject to review on an annual basis, so please contact the sales team if you do not have an up-to-date copy at sales@lantra.co.uk			Product Directory and/or sales team
Related documents	An assessment guidance handbook is available for providers and assessors, which can be found on the Lantra Awards website. Other assessment-related paperwork can be located within Quartzweb.			www.lantra.co.uk
How do I register learners?	Via Quartzweb: https://ordering.lantra.co.uk/Login.aspx			Quartzweb user guide

5 Content of the Qualifications

Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor qualification consists of four mandatory units: two mandatory optional units to give two distinct pathways within the qualification and one optional additional unit.

Learners must complete all the mandatory units and at least one mandatory optional unit in order to gain the qualification.

Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor			
Unit title	M/O*	GLH	Credits
Tree Species Recognition, Growth Characteristics and Associated Hazards	M	6	1
Managing Vegetation in Proximity to the Utility Infrastructure	M	4	1
Environment and Wildlife for Utility Vegetation Management	M	4	1
Surveying for Utility Arboriculture	M	6	1
Mandatory optional units			
Electrical Networks	O	6	1
Railway Networks	O	6	1
Optional unit			
Tree Inspection for Utility Arboriculture	O	12	1

* Mandatory or optional

Unit title	Tree Species Recognition, Growth Characteristics and Associated Hazards
Unit level	3
Unit credit value	1
Unit reference number	K/616/1911
Unit purpose and aim(s)	This unit provides the learner with the knowledge and skills to identify a number of tree species, growth characteristics and associated hazards. It represents the outcomes necessary to demonstrate knowledge.

Learning outcome The learner will:	Assessment criteria The learner can:
1 Understand the significance of botanical nomenclature.	1.1 Explain the significance of taxonomic terminology.
2 Be able to identify broadleaf tree species.	2.1 Identify broadleaf trees by common and botanical names.
3 Be able to identify coniferous tree species.	3.1 Identify coniferous species.
4 Be able to identify a range of shrubs.	4.1 Identify a range of shrubs.
5 Understand the significance of the differing characteristics of species in relation to overhead line clearance.	5.1 Explain the different characteristics of tree species. 5.2 Explain the impact on overhead line clearance of fast-growing tree species. 5.3 Explain the impact on overhead line clearance of slow-growing tree species. 5.4 Explain the significance, in relation to proximity of overhead lines, of pruning tree species that readily produce sprout growths. 5.5 Explain the significance, in relation to the proximity of overhead lines, of tree species that are considered to be brittle. 5.6 Explain factors that can influence the growth of trees.
6 Understand hazards associated with climbing plants.	6.1 Explain the hazards associated with climbing plants in proximity to overhead lines.
7 Understand hazards and defects related to trees.	7.1 Explain hazards and defects that may be present on trees. 7.2 Explain how overhang of trees in proximity to overhead lines can be dangerous.
8 Understand ill health in trees.	8.1 Explain symptoms of ill health in trees. 8.2 Explain implications of ill health in trees.

Learning outcome The learner will:	Assessment criteria The learner can:
9 Be able to identify decay fungi and its significance.	9.1 Identify decay fungi. 9.2 Explain the significance of fungi identified. 9.3 Identify significant insect pests. 9.4 Explain what is meant by biosecurity.

Learning outcome 1 – Understand the significance of botanical nomenclature

The learner should understand that botanical names are often used in preference to common names because they are definitive, whereas one plant may be known by several different common names and the same common name may be used for several different plants.

The learner should know the role of the different parts of a botanical name and the order in which they are used. This should include:

- Genus
- Species
- Variety
- Cultivar.

Learning outcome 2 – Be able to identify broadleaf tree species

From the list in the table below, the learner should be able to correctly identify the trees marked with an asterisk using common and botanical names, along with a range of others. A field guide may be used if necessary.

Learning outcome 3 – Be able to identify coniferous tree species

From the list in the table below, the learner should be able to correctly identify the trees marked with an asterisk using common and botanical names, along with a range of others. A field guide may be used if necessary.

Learning outcome 4 – Be able to identify a range of shrubs

The learner should be able to correctly identify a range of shrubs using common and botanical names. A field guide may be used if necessary. Those included in the table below are given as recommendations.

Learning outcome 5 – Understand the significance of the differing characteristics of species in relation to overhead line clearance

The learner must be able to describe different characteristics of tree species and provide examples in each case. For the trees included in the table below, their rate of growth is noted, as well as the brittleness of their timber and their tendency to produce epicormic or 'twiggy' regrowth after pruning.

Learners should be aware that fast-growing species will require more frequent pruning and may need to be removed from close proximity to the utility. However, although slow-growing species require less frequent attention, they may have been overlooked when planning works.

They should also understand that, where pruning opens out areas and lets more light into sites, very rapid regrowth can result in those species that readily produce sprout growths. Consequently, these species are likely to require more frequent cutting. It can be beneficial, or indeed necessary, to remove these species from close proximity to the utility, especially in the case of overhead powerlines.

In the case of tree species with brittle timber, they are more likely to fail under the increased load resulting from rapid growth, wind, snow, etc. There can also be a tendency for branches to break off early when being cut.

Learners need to understand that there are several other factors that will affect the rate of growth, including:

- Age: a younger tree will tend to be more vigorous in its growth than a more mature tree
- Condition: trees in poor health or under stress will tend to grow more slowly than those in good health
- Soil: the fertility, pH and moisture availability of a soil can directly influence the rate of growth, as will the depth of top soil and its texture, structure and degree of compaction
- Climate: temperature range, as well as the extremes of heat and cold, can have both direct and indirect effects. In addition to scorch and frost damage, the temperatures will influence the rate of plant metabolic processes
- Location: the site and position of a tree will also affect the rate of growth, as it influences the microclimate. A tree in a sheltered site has the potential to grow more rapidly than one in a more exposed position. The site can also affect light levels, exposure to wind and availability of water.

Common name	Botanical name	Rate of growth	Brittle timber	Prone to epicormic regrowth
Broadleaves				
Alder	<i>Alnus glutinosa</i>	Fast	No	Yes
Apple (crab)	<i>Malus sylvestris</i>	Slow	No	No
Apple (common)	<i>Malus domestica</i>	Slow	No	No
Ash*	<i>Fraxinus excelsior</i>	Fast	No	Yes
Aspen	<i>Populus tremula</i>	Fast	Yes	Yes
Beech*	<i>Fagus sylvatica</i>	Slow	No	No
Blackthorn	<i>Punus spinosa</i>	Slow	No	Yes
Black walnut	<i>Juglan nigra</i>	Slow	No	No
Box	<i>Buxus sempervirens</i>	Slow	No	No
Cherry (bird)	<i>Prunus padus</i>	Slow	No	Yes
Cherry (wild)	<i>Prunus avium</i>	Slow	No	Yes
Elm (wych)	<i>Ulmus glabra</i>	Slow	No	Yes
Eucalyptus	<i>Eucalyptus gunnii</i>	Fast	No	No
European lime*	<i>Tilia x europaea</i>	Slow	No	Yes
Hawthorn*	<i>Crataegus monogyna</i>	Slow	No	Yes
Hazel*	<i>Corylus avellana</i>	Fast	No	Yes
Holly	<i>Ilex aquifolium</i>	Slow	No	No
Hornbeam	<i>Carpinus betulus</i>	Slow	No	No
Horse chestnut	<i>Aesculus hippocastanum</i>	Fast	Yes	Yes
Laburnum	<i>Laburnum anagyroides</i>	Slow	No	No
London plane	<i>Platanus x hispanica</i>	Slow	No	No
Maple (Norway)	<i>Acer platanoides</i>	Fast	Yes	Yes
Maple (field)	<i>Acer campestre</i>	Slow	No	Yes
Oak English*	<i>Quercus robur</i>	Slow	No	Yes
Poplar (hybrid black)*	<i>Populus canadensis</i>	Fast	Yes	Yes
Poplar (Lombardy)	<i>Populus nigra 'Italica'</i>	Fast	Yes	Yes
Rowan	<i>Sorbus aucuparia</i>	Slow	No	No
Silver birch*	<i>Betula pendula</i>	Fast	Yes	No
Sweet chestnut	<i>Castanea sativa</i>	Fast	No	Yes
Sycamore*	<i>Acer pseudoplatanus</i>	Fast	Yes	Yes
Whitebeam	<i>Sorbus aria</i>	Slow	No	Yes
Willow (crack)*	<i>Salix fragilis</i>	Fast	Yes	Yes
Willow (goat)	<i>Salix caprea</i>	Fast	Yes	Yes

Common name	Botanical name	Rate of growth	Brittle timber	Prone to epicormic regrowth
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Conifers

Fir (Douglas)	<i>Pseudotsuga menziesii</i>	Fast	No	No
Fir (grand)	<i>Abies grandis</i>	Fast	Yes	Yes
Fir (noble)	<i>Abies procera</i>	Fast	Yes	Yes
Juniper	<i>Juniperus communis</i>	Slow	No	No
Larch*	<i>Larix decidua</i>	Fast	Yes	No
Lawson's cypress	<i>Chamaecyparis lawsoniana</i>	Fast	No	No
Leyland cypress*	<i>XCuprocyparis leylandii</i>	Fast	No	No
Pine (Corsican)	<i>Pinus nigra var. maritima</i>	Fast	No	No
Pine (lodgepole)	<i>Pinus contorta var. latifolia</i>	Fast	No	No
Pine (Scots)*	<i>Pinus sylvestris</i>	Fast	No	No
Spruce (Norway)	<i>Picea abies</i>	Fast	No	No
Spruce (Sitka)	<i>Picea sitchensis</i>	Fast	No	No
Yew	<i>Taxus baccata</i>	Slow	No	Yes

Shrubs

Box	<i>Buxus sempervirens</i>			
Cotoneaster	<i>Cotoneaster dammeri</i>			
Dogwood	<i>Cornus alba</i>			
Gorse	<i>Ulex europaeus</i>			
Laurel	<i>Prunus laurocerasus</i>			
Rhododendron	<i>Rhododendron ponticum</i>			
Wayfaring tree	<i>Viburnum lantana</i>			

Learning outcome 6 – Understand hazards associated with climbing plants

It is not uncommon to find climbing plants growing on trees. These can cause problems, in that they may mask the condition of the tree, making inspection more difficult. They will also increase the weight, and hence the stresses on the trunk and branch work.

Where climbers are growing in proximity to electrical equipment, it is possible for the vegetation to become 'live' or obscure electrical equipment, making it difficult to identify network defects.

Learning outcome 7 – Understand hazards and defects related to trees

Learners will need to be able to describe a range of hazards and defects that may be present on trees, which may indicate possible structural problems.

These may include:

Hazard/defect	Explanation
Fungal fruiting bodies.	The development of fungal fruiting bodies can indicate that the decay fungus has developed to a point where it has sufficient energy to produce spores. Fruiting bodies appearing around the circumference of the tree would suggest that the decay is well advanced within the tree. It is essential to correctly identify and understand the nature of the specific decaying fungus, as the way that the timber of the host tree is affected will differ in each case.

Lifted roots, damaged roots and/or ground heave.	Lifting of the root plate, or the tree being partly windthrown, indicates that the anchorage system of the tree is no longer functioning. This may not always be obvious from looking at the tree, but indicators, such as cracking in the soil or soil shear around the root plate, may be symptomatic of this. It should be recognised, however, that partly windblown trees can regain stability through re-rooting.
Included bark.	This forms where two or more branches grow closely together (at weak branch angles) and the bark grows between the branches inside the branch union. The result is that the wood of the branches cannot and does not bind together, resulting in a very weak union. Over time, as the included bark thickens, it forces the two branches apart, resulting in the failure of one of the branches.
Compression fork.	These are inherently weak forks, with a V-shaped union, the limbs meeting at an acute angle and therefore likely to be pulled apart more easily than normal. This issue can occur in branch unions and where two or more leaders develop in the tree. The development of co-dominant leaders often happens at an early stage in the growth of the tree and may be due to browsing, frost damage or other physical damage. If not corrected through good formative pruning, it results in the loss of apical dominance.
Cavities.	These are hollows or voids where wood has been lost, either because of the growth pattern of the tree or, more usually, due to the action of a biotic agent decaying the wood. The number, size and position of any cavities will influence the likelihood of failure.
Dog-legs.	These are the abrupt bends which can develop when a side shoot replaces a pruned, broken or dead branch-end. If the timber is not healthy, as the shoot grows and thickens, stress is exerted on the branch resulting in branch failure.
Bottle butt.	'Bottle butt' usually refers to the swelling or increased girth sometimes seen at the base of a tree that has internal decay. It is caused by the laying down of reaction wood as a part of the tree's growth to provide adequate support for the crown. The term can be applied to swellings on other parts of the tree, when bulges are similarly indicative of internal decay.
Hazard beams.	This is an engineering term that is applied to upwardly curving stems and branches that develop longitudinal splits due to internal lateral stresses. Ribs of new wood may develop along the length of the crack. However, they do not close the wound. Hazard beams do not often result in total failure of the branch or stem but are worthy of note as they can be a point of access for pathogens and may also become bat roosts.
Horizontal ribs/cracking.	The presence of horizontal bulges, creases or ribs can be indicative of a response to internal fibre buckling as a result of compression forces. On grafted trees, it may also result from an incompatible graft between stock and scion.

Vertical ribs and open cracks.	Ribs are an indicator of internal cracking within the tree. Where the rib is 'sharp', it suggests that the crack is still allowing movement, whereas if the rib is rounded, the crack has been overlaid by annual rings. Vertical cracks are not necessarily an indicator of impending failure and can heal over. There can be a number of factors leading to their development, including lightning, frost (e.g. where, following a frost, one side of the stem is in sun and so thawing, while the other is shaded and still freezing) and shear forces (e.g. when tension and compression is exerted on the stem by the wind).
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Other hazards or defects that might be referred to are:

- Cankers
- Deadwood
- Splits in the bark
- Peeling bark
- Animal damage
- Mechanical damage
- A very thin crown
- Old pollards or topped and looped trees.

Learners will need to be able to define a dangerous overhang as either a defective branch, part of a tree or a whole tree that is overhanging conductors and could cause damage to the conductor or disrupt the supply.

Dangerous overhangs may include: long or heavy lateral branches; branches weakened due to pest, disease or mechanical damage; weak or brittle sections or overloaded unions; hanging branches that may be blown off; trees with a defect; and partially windblown or uprooted trees.

The learner should also be aware of the possibility of creating a dangerous overhang by using poor practices such as over pruning.

Learning outcome 8 – Understand ill health in trees

Learners should be able to identify symptoms of ill health in trees that suggest further inspection may be required. These may include:

- Lead discolouration
- Crown dieback
- Peeling and dead bark
- A very thin crown
- Fungal fruiting bodies.

The learner should be able to explain that ill health in trees may increase the potential for other problems to develop. For example:

- An increased likelihood of windblow
- Greater potential for branch drop
- Exacerbation of any defects.

Ill health will also reduce the amenity value of the tree and may be a source of infection from which disease can spread to other trees.

Learning outcome 9 – Be able to identify decay fungi and its significance

The learner should be able to identify a range of species of decay fungi from the list below and be aware of their significance. It will be necessary for the learner to be able to identify the fungi on-site where the sample may not be in 'perfect' condition. Identification by common name is acceptable. A field guide may be used if necessary.

Common name	Botanical name	Host and position on host	Infection strategy	Rot type	Damage caused
Honey fungus	<i>Armillaria mellea</i>	Most broadleaves and <i>Taxus</i> : roots and lower stem	Active pathogenesis	Selective white rot	Aggressive: can be primary infection and result in windblow by ductile fractures of the root or (rarely) stem fracture
Tinder bracket	<i>Fomes fomentarius</i>	Range of broadleaves, especially <i>Fagus</i> and <i>Betula</i> : stem and large branches	Sapwood exposed	Simultaneous white rot	Can result in brittle branch and stem snap
Southern bracket	<i>Ganoderma adspersum</i>	Range of broadleaves: lower stem, although can track up damage	Heartwood	Selective white rot	Results in ductile fractures of the stem and occasionally windblow
Artist fungus	<i>Ganoderma applanatum</i>	Range of broadleaves: lower stem, although can track up damage	Heartwood	Selective white rot	Results in ductile fractures of the stem and occasionally windblow
Hen of the woods	<i>Grifola frondosa</i>	<i>Quercus</i> and <i>Castanea</i> : base of stem	Heartwood	Selective white rot	Can result in dieback and (occasionally) ductile fractures of the stem
Root rot fungus	<i>Heterobasidion annosum</i>	<i>Picea</i> , <i>Larix</i> , <i>Pinus</i> etc.: root rot	Active pathogenesis	Selective white rot	Rarely results in the failure of the tree

	<i>Inonotus dryadeus</i>	<i>Quercus</i> : root rot	Heartwood	Selective white rot	Results in ductile fractures or wind blow
Shaggy bracket	<i>Inonotus hispidus</i>	<i>Fraxinus</i> , <i>Platanus</i> and <i>Juglans</i> : stem and branches	Heartwood	Simultaneous white rot	Brittle fractures especially problematic on <i>Fraxinus</i> , less so on <i>Platanus</i>
Chicken of the woods	<i>Laetiporus sulphureus</i>	<i>Quercus</i> , <i>Castanea</i> and <i>Prunus</i> : stem	Heartwood	Brown rot	Causes brittle fractures
Giant polypore	<i>Meripilus giganteus</i>	<i>Fagus</i> and some other broadleaves: root plate and lower stem	Heartwood	Soft or simultaneous white rot	Windblow, from brittle fracture of the roots
	<i>Perenniporia fraxinea</i>	<i>Fraxinus</i> , <i>Fagus</i> , <i>Populus</i> and other broadleaves: stem	Heartwood	Simultaneous white rot	Ductile and brittle fractures
Dyer's mazegill	<i>Phaeolus schweinitzii</i>	<i>Pseudotsuga</i> , <i>Picea</i> and <i>Pinus</i> etc.: base of stem and roots, rarely higher on stem	Heartwood	Brown rot	Wood smell of turpentine, causes brittle fractures
Razor strop fungus or birch polypore	<i>Piptoporus betulinus</i>	<i>Betula</i> : stem and branches	Sapwood intact (stress)	Brown rot	Usually brought on by stress causing brittle fractures
Dryad's saddle	<i>Polyporus squamosus</i>	<i>Fagus</i> , <i>Tilia</i> , <i>Acer</i> and other broadleaves: stem and branches	Sapwood exposed	Simultaneous white rot	Can result in fractures, but more commonly is compartmentalised, unless severe pruning or topping has occurred
Wood cauliflower or cauliflower fungus	<i>Sparassis crispa</i>	<i>Pseudotsuga</i> , <i>Picea</i> and <i>Pinus</i> : base of stem	Heartwood	Brown rot	Results in wind blow or brittle fracture at base
Brittle cinder	<i>Kretzschmaria deusta</i> (syn. <i>Ustulina deusta</i>)	<i>Acer</i> , <i>Tilia</i> and <i>Fagus</i> etc.: base of stem	Heartwood	Soft or simultaneous white rot	Has both anamorph and teleomorph stage. Causes brittle fractures

The learner should be aware of the potential significance of the presence of the fungus in relation to:

- Climbing safety
- Biosecurity
- Security of the utility
- Structural integrity of the tree.

The learner should be able to identify a range of insect pests (from images or on-site) such as:

- Elm bark beetle
- Oak processionary moth
- Spruce bark beetle
- Leopard moth.

These may include invasive, non-native species that have, as yet, not established in the UK, but pose a significant threat, such as:

- Asian long-horn beetle
- Emerald ash borer.

The learner should understand that biosecurity is a range of procedures or measures designed to stop the introduction or spread of harmful organisms or biochemical substances. They should be aware of the importance of biosecurity in not spreading harmful organisms or invasive species between sites, or pathogens between trees on a site.

Unit title	Managing Vegetation in Proximity to the Utility Infrastructure
Unit level	3
Unit credit value	1
Unit reference number	R/616/9517

Learning outcome The learner will:	Assessment criteria The learner can:
1. Demonstrate a knowledge of trees and their characteristics.	1.1 Specify where tree species are appropriate and inappropriate for planting close to conductors. 1.2 Explain the use of allelopathic plants to control vegetation growth.
2 Understand how veteran trees in proximity of utilities should be managed.	2.1 Explain what is meant by the term 'veteran tree'. 2.2 Explain how veteran trees in proximity of overhead utilities should be managed. 2.3 Identify signs that a large tree is in decline. 2.4 Explain the implications of working on trees with defects, damage or decay.
3 Understand what is meant by the term 'dangerous overhang' and how it can affect utilities.	3.1 Understand what is meant by the term 'dangerous overhang'. 3.2 Understand how dangerous overhangs can affect utilities. 3.3 Explain that dangerous overhangs may result from poor practices.
4 Understand the use of pruning in maintaining the infrastructure.	4.1 Explain what is meant by 'natural target pruning'. 4.2 Describe a range of pruning types used in utility tree work. 4.3 Explain the use of pruning in maintaining the infrastructure. 4.4 Explain the implications of poor pruning practices. 4.5 Explain the benefits of good pruning practices. 4.6 Explain where restricted cutting may be required.
5 Understand the need to deal with of arisings appropriately.	5.1 Explain the considerations for dealing with arisings. 5.2 Specify the options for dealing with arisings from small-scale pruning operations.

Learning outcome 1 – Demonstrate a knowledge of trees and their characteristics

Learners must demonstrate a knowledge of native tree species that:

- Could be planted close to conductors and where future pruning will not adversely affect the tree, such as hawthorn, blackthorn or crab apple
- Would be unsuitable for planting near to conductors, such as birch, lime or alder.

State that allelopathic plants produce an exudate, suppressing competition.

Learning outcome 2 – Understand how veteran trees in proximity of utilities should be managed

The learner should be able to explain that a veteran tree is one that, because of its great age, size or condition, is of exceptional cultural, landscape or nature conservation value.

And that, where veteran trees are near utilities, good practice is to control the risk by reduction rather than felling.

The learner should be able to identify indicators that a large tree is in decline, such as:

- Crown dieback, a significant number of dead limbs, thinning of the main canopy
- Fungal fruiting bodies
- Peeling bark.

The learner should be aware of the potential difficulties posed when working on trees with defects, damage or decay, such as:

- Fungal decay may result in timber being brittle or elastic
- Decay, defect or damage may render trees unsafe to climb.

Learning outcome 3 – Understand what is meant by the term ‘dangerous overhang’ and how it can affect utilities

The learner should be able to state that a dangerous overhang is a defective branch or part of a tree or trees overhanging utilities that might cause damage to the utility or disrupt the supply, and that a dangerous overhang can be the result of poor practices such as over pruning, and that under pruning may also leave such an overhang.

The learner will need to be able to suggest ways in which a dangerous overhang may affect utility infrastructure, such as:

- Damage to network
- Loss of supply
- Flashover.

Learning outcome 4 – Understand the use of pruning in maintaining the infrastructure

Learners should state that ‘natural target pruning’ makes use of the branch collar to identify the proper location to remove a branch, and that the ‘three-cut’ process that should be used to remove branches while preserving the bark tissue and the branch collar.

The learner will be able to describe each of the following types of pruning and their application:

- Under pruning

- Side pruning
- Through pruning
- Reduction pruning
- Directional pruning.

The learner should understand the implications of each of the following:

- Use of directional pruning
- Recommendations of BS3998 re. number and size of pruning cuts
- Results of pruning in promoting regrowth.

The learner will understand the implications of poor pruning practices including:

Poor pruning practices	Result
Over pruning	Poor tree architecture, excessively long laterals, open crown prone to too much movement.
Lopping and topping	Cause stress, often resulting in disease and decay.
Flush cuts	Increase wound area, remove all or part of collar, discourage healing and encourage epicormic growth.
Tears	Resulting from not using the 3-cut method. Aesthetically displeasing. Allows disease to enter. Encourages die-back.
Stubs left	Aesthetically displeasing. Shoots from stubs can quickly grow back into utility.

The learner will be able to describe the benefits of good pruning practices to tree development such as:

- Good crown architecture – even distribution of branch work and leaf cover
- Maintains ‘typical’ shape and leaf cover for the species.

The learner must be able to give reasons why restricted cutting may be specified so as to:

- Achieve a minimum acceptable clearance
- Comply with environmental or planning controls
- Comply with the requirements of the landowner
- Maintain the form of the tree.

Learning outcome 5 – Understand the need to deal with arisings appropriately

The learner must be able state factors to be considered when disposing of arisings, such as:

- Disposal must comply with relevant legislation
- The method of dealing with arisings must be agreed with the landowner and should be agreed in writing

- Burning is the least acceptable option as carbon particles in the smoke increase the risk of flashover and heat from fires can reduce conductor height and could damage equipment.

And suggest options for dealing with arising from small-scale and routine pruning operations, such as:

- Removal from site
- Windrow/eco-pile
- Chip and stack.

Unit title	Surveying for Utility Arboriculture
Unit level	3
Unit credit value	1
Unit reference number	D/616/9519

Learning outcome The learner will:	Assessment criteria The learner can:
1. Health and Safety Management.	1.1 Understand the implications of legislation. 1.2 Explain the type of exemption to trees afforded by statutory undertakers. 1.3 Explain the safety requirements for conducting surveys.
2. Understand the role of utility surveyor.	2.1 Define the role of utility surveyor
3 Negotiate the necessary permissions for work to be carried out.	3.1 Understand the behaviours expected of a surveyor undertaking utility surveys. 3.2 Communicate reasons for carrying out work following preparation of proposals.
4 Carry out a line span survey.	4.1 Prepare a risk assessment for the site prior to the start of the survey and inspection. 4.2 Prepare emergency procedure documentation. 4.3 Explain the elements required to reference individual trees within a working span. 4.4 Carry out a span survey. 4.5 Estimate the resources needed to complete work identified in a span survey.
5 Understand where additional precautions over and above the standard contact with the landowner might be required.	5.1 Specify where additional precautions over and above the standard contact with the landowner might be required.

Learning outcome 1 – Health and safety management

The learner should be able to summarise the key points, relevant to the work being undertaken, of the following legislation:

- Occupiers Liability Act – owner/occupiers' responsibility for tree
- The Health and Safety at Work Act, etc. 1974
- The Highways Act 1980 and Local Government (Miscellaneous Provisions) Act 1976
- The Town and Country Planning Act 1990 and The Town and Country Planning (Tree Preservation) (England) Regulations 2012
- The Town and Country Planning Act 2008.

Learning outcome 2 – Understand the role of utility surveyor

The learner should be able to explain that the role of a utility surveyor may include:

- Patrolling sections of the utility
- Assessing the trees within falling distance of utility and associated infrastructure
- Preparing reports and other paperwork to enable tree works to be undertaken (to the client and landowner's specifications) in accordance with industry best practice.

Learning outcome 3 – Negotiate the necessary permissions for work to be carried out

The learner should be able to give examples of behaviours expected of surveyors, such as:

- Only use agreed access routes
- Follow the Country Code
- Always carry current DNO identification
- Comply with biosecurity measures
- Be courteous.

The learner should be able to explain how they would communicate reasons for carrying out work to stakeholders, such as:

- Specific clearance required to meet with statutory undertaker's standard
- Arboricultural standards explained
- Reasons for pruning cuts to gain possible restricted clearance.

Learning outcome 4 – Carry out a line span survey

The learner should be able to prepare risk assessments for a site, including:

- Generic risk assessments
- Site risk assessment
- Electrical risk assessment
- CoSHH assessment
- Environmental considerations.

And the associated emergency procedure documentation for a site, recording information such as:

- Location:
 - Address, postcode
- Grid reference of work site
- Name/number of circuit/line etc. identified
- Span (pole numbers)
- Identify access point
- Nearest telephone location
- Telephone numbers for
 - DNO control room
 - Emergency services
- Mobile phones' signal strength and battery checked

- Location of nearest accident and emergency unit.

The learner should be able to identify the elements required to reference individual trees within a working span, including:

- Species
- Location
- Age type (e.g. young, mature, veteran)
- Reference number (if applicable)
- Condition (e.g. alive/dead/defects).

And complete and record a span survey, including a range of information such as:

- Site location
- Plans, sketches, marked maps, etc.
- Identify points of pedestrian and vehicle access
- Correctly identifying work, clear and permanently clear spans
- Live or dead working
- Identify category A, B, C or D trees
- Identify trees by location and species
- Any dangerous overhang to be identified
- Clearance distances
- Specify the work to be carried out
- Forms signed and dated.

Outcomes should include specifying the resources required to complete any work identified in a survey, including:

- Estimation of job time/staff/staff hours
- Identify specific skills required by staff
- Specify the equipment required (e.g. woodchipper, MEWP).

Learning outcome 5 – Understand where additional precautions over and above the standard contact with the landowner might be required

The learner should be able to give examples of where additional precautions might be required, such as:

- Protected sites (including SSSIs etc.)
- European Protected Species (EPS) sites
- Network Rail sites
- Forestry Commission sites.

Unit title	Environment and Wildlife for Utility Vegetation Management
Unit level	3
Unit credit value	1
Unit reference number	Y/616/9518

Learning outcome The learner will:	Assessment criteria The learner can:
1. Understand the implications of environmental legislation.	1.1 Demonstrate a knowledge of the implications of relevant legislation.
2. Understand the limitations of the use of herbicides.	2.1 Understand how herbicides are used in the control of vegetation growth in proximity to utilities. 2.2 Explain the limitations on the use of herbicides in the control of vegetation in proximity to utilities.
3. Understand the importance of linear utilities as wildlife corridors.	3.1 Explain what is meant by the term 'wildlife corridors'. 3.2 Understand how sites may be managed to benefit or encourage wildlife.
4. Understand the importance of managing hedgerows.	4.1 Explain the implications of the Hedgerows Regulations 1997. 4.2 Explain the methods of management of hedgerows.
5. Demonstrate an understanding of protected species.	5.1 Explain the statutory protection for some species of plants and animals. 5.2 Identify indicators of potential bat roosts. 5.3 Explain the management considerations for sites where bats may be present. 5.4 Explain the management considerations for sites where EPS or Schedule 1 birds may be present. 5.5 Specify examples of species of Schedule 1 birds. 5.6 Specify examples of EPS.

Learning outcome 1 – Understand the implications of environmental legislation

The learner should be aware of how the following legislation may be relevant to the work being undertaken:

- Forestry Act 1967
- The Wildlife and Countryside Act 1981
- Town and Country Planning Act 1990
- Environmental Protection Act 1990
- Conservation (Natural Habitats & C) Regulations 1994
- Countryside Rights of Way Act 2000

- Nature and Conservation Act (Scotland) 2004
- Conservation of Habitats and Species Regulations 2010.

Learning outcome 2 – Understand the limitations of the use of herbicides

The learner should be able to explain how herbicides are used to control vegetation in proximity to utilities, and the limitations with their usage, such as:

- Can be used in managing fast-growing species beneath conductors and around substations
- Many herbicides cannot be used where there is risk of run-off.

Learning outcome 3 – Understand the importance of linear utilities as wildlife corridors

The learner should be able to explain that wildlife corridors allow the movement of animals and plants from one area to another.

The learner should be able to explain how sites might be managed to benefit wildlife, such as:

- Leaving areas of low-growing vegetation
- Providing habitat piles of stacked cut material
- Creating open spaces in dense woodland.

Learning outcome 4 – Understand the importance of managing hedgerows

The learner should be able to explain the implication of the Hedgerows Regulations 1997 on vegetation management, including:

- The regulations apply to any hedgerow adjacent to common, protected forestry or agricultural land including equine
- Important hedgerows are those that have existed for 30 years or more or that satisfy at least one of the criteria in Part II of Schedule 1
- Exemptions for the N.O. exist by way of Schedule 4 Paragraph 9 of the Electricity Act 1989(c). This allows cutting back or felling to prevent obstruction or interference with the conductors or plant.

And to explain the application of different methods of hedgerow maintenance, such as:

Flail cutting or topping	To be used only where hedges are regularly trimmed or for farm hedgerows previously cut by flail.
Coppicing	Can be used to encourage the regeneration of hedgerows from their base.
Laying	Can be undertaken, when the right context and material is available, and this too will regenerate hedgerows that are thick to the base.

Learning outcome 5 – Demonstrate an understanding of protected species

The learner should be able to summarise the key points of the relevant legislation, including that:

- It is prohibited to uproot any wild plant species and forbids any picking, uprooting or destruction of certain listed plants
- It is an offence to kill, injure or take any wild bird, or to take, damage or destroy the nest of a wild bird while in use or being built
- There are additional penalties relating to disturbing listed nesting birds at nest, their eggs or dependent young
- The intentional killing, injuring or taking of listed wild animals is prohibited and is a criminal offence.

The learner should be able to identify indicators of potential bat roosts, such as:

- Potentially, any individual or groups of trees, particularly mature trees
- Trunk hollows, knot holes, splits/cracks in branches
- Sheltered areas created by loose bark and beneath ivy.

And the management considerations for sites where bats are present, such as:

- It is an offence to deliberately (or recklessly, in Scotland) disturb a bat, in particular disturbance that impairs its ability to survive, breed, reproduce, rear or nurture young, hibernate or migrate, or affects significantly the local distribution or abundance of the species
- It is important to avoid cutting potential bat roost trees in the periods May–August and December–March when maternity roosts and hibernation roosts are vulnerable.

The learner should be able to explain that if any EPS or Schedule 1 birds are suspected to be present on-site:

- Work must stop. No work can be undertaken if EPS or Schedule 1 birds are present on the site
- Specialist advice must be sought before any further work can be carried out.

The learner should be able to give examples of Schedule 1 birds, such as:

- Brambling
- Crossbill
- Fieldfare.

The learner should be able to give examples of a range of protected species, such as:

- Dormice
- Great crested newts
- Natterjack toads.

Unit title	Electrical Networks
Unit level	3
Unit credit value	1
Unit reference number	M/616/9525

Learning outcome The learner will:	Assessment criteria The learner can:
1 Demonstrate knowledge of the legislation and guidelines pertaining to vegetation management in proximity of electrical systems.	1.1 Explain the significance of the key legislation and guidelines pertaining to vegetation management in proximity of electrical systems.
2 Understand electrical diagrams and maps.	2.1 Identify various parts of electrical systems. 2.2 Interpret electrical diagrams and maps.

Learning outcome 1 – Demonstrate knowledge of the legislation and guidelines pertaining to vegetation management in proximity of electrical systems

The learner should be able to summarise the key points of legislation and guidelines pertaining to vegetation management in proximity to overhead powerlines, including:

Engineering Recommendation G55 – Safe Tree Working in Proximity to Overhead Electric Lines.	<ul style="list-style-type: none"> • Categorisation of A, B, C and D trees • Competence of operators • Electrical risk assessments • Live zones • Vicinity zones.
Electricity Act 1989 Schedule 4, Paragraph 9.	<p>This provides for work to be carried out on trees and shrubs that obstruct or interfere with the electricity network or represent a danger.</p> <p>It empowers the DNO to:</p> <ul style="list-style-type: none"> • Give notice to occupiers (and owners if different) requiring vegetation management work to be carried out • Where the notice has not been complied with within 21 days, cause felled trees, limbs, roots or cuttings to be removed in accordance with good arboricultural practice (doing as little damage as possible to trees, fences, hedges and growing crops) and the directions

	<p>of the landowner. Any damage caused to the land being made good</p> <ul style="list-style-type: none"> Note that DNOs usually operate their own vegetation management programmes and will carry out work on behalf of landowners.
Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR 2002).	<p>These regulations:</p> <ul style="list-style-type: none"> Specify safety standards to protect the public and consumers from danger Contain power quality and supply continuity requirements to ensure an efficient and economic electricity supply service. <p>To achieve this, the DNOs have a duty to maintain minimum clearances.</p>
2006 amendments to ESQCR.	<p>These extend the DNOs' duty to make the overhead networks resilient to the effect of major storms by reducing the effect of falling trees and windborne material hitting the overhead network.</p>
ENA Engineering Technical Report 136 Issue 1 – June 2007 Vegetation Management Near Electricity Equipment – Principles of Good Practice.	<ul style="list-style-type: none"> Provides guidance-generic principles of good practice for vegetation management including tree cutting Covers all phases of work from the planning stage to completion.
Health and Safety Guidance – HS(G) 47 – Avoidance of Danger from Underground Services.	<p>This guidance covers:</p> <ul style="list-style-type: none"> Identifying and managing hazards Work planning Detecting, identifying and marking services Safe excavations.
Health and Safety Guidance – GS6: Avoiding Danger from Overhead Power Lines.	<p>This general guidance covers:</p> <ul style="list-style-type: none"> Types of overhead powerlines and their heights Legal requirements Accident prevention Working in proximity to overhead lines connected to buildings Emergency procedures.
Electricity at Work Regulations 1989.	<p>These Regulations' aim is to prevent death or injury to any person from electrical causes in connection with work activities.</p>

Town and Country Planning (Tree Preservation) (England) Regulations 2012.	These Regulations cover Tree Preservation Orders that prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees (including the cutting of roots) without the consent of the local planning authority.
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Learning outcome 2 – Understand electrical diagrams and maps

The learner must be able to identify components of electrical systems including:

- Aerial bundled conductor
- Air break switch (pole-top mounted and under-slung)
- Auto reclosers/pole-mounted circuit breakers
- Cable terminal pole (HV and LV)
- Fuses (HV and LV)
- Grid and primary substations
- Jumpers (HV and LV)
- Secondary distribution substations
- Transformers (11 kV and 33 kV OHLs)
- Transmission tower lines
- LV, HV, EHV
- Points of isolation.

And be able to interpret schematic diagrams from the distribution network operator to:

- Identify the correct location, physically and ‘electrically’
- Determine where electrical systems are alive or dead.

Unit title	Railway Networks
Unit level	3
Unit credit value	1
Unit reference number	T/616/9526

Learning outcome The learner will:	Assessment criteria The learner can:
1. Demonstrate knowledge of the legislation and guidelines pertaining to vegetation management in proximity of rail infrastructure.	1.1 Explain the significance of the key legislation and guidelines pertaining to vegetation management in proximity of rail infrastructure.
2. Be able to identify types of rail infrastructure assets and their function.	2.1 Identify of the types of rail infrastructure assets. 2.2 Demonstrate how to identify sites on the railway network. 2.3 Explain access and egress arrangements and site security. 2.4 Explain the purpose of railway infrastructure and the requirements for vegetation management.
3. Be able to understand how trees interact positively and negatively with rail infrastructure.	3.1 Explain the significance, regarding management of vegetation standard control documentation and its design principles. 3.1 Explain the key conditions that require management. 3.2 Explain the risks that vegetation poses to the railway. 3.3 Explain how the risks that vegetation poses to the railway are controlled. 3.4 Explain the key situations that require management. 3.5 Describe the Track Engineering Forms (TEF) and their function when assessing vegetation and tree risk. 3.6 Explain requirements for vegetation management for railway infrastructure assets.
4. Be able to understand the operational requirements within standard control frameworks.	4.1 Explain access and egress arrangements and requirements where works are undertaken. 4.2 Produce a scope of works for a given site.
5. Be able to understand requirements regarding operational planning and on-site risk control.	5.1 Explain the design requirements when planning to undertake clearance work.

Learning outcome 1 – Demonstrate knowledge of the legislation and guidelines pertaining to vegetation management in proximity of rail infrastructure

The learner should be able to summarise the main points of key legislation and guidelines pertaining to vegetation management, including:

Health and Safety Guidance – HS(G) 47 – Avoidance of Danger from Underground Services.	This guidance covers: <ul style="list-style-type: none"> • Identifying and managing hazards • Work planning • Detecting, identifying and marking services • Safe excavations.
Health and Safety Guidance – GS6: Avoiding Danger from Overhead Power Lines.	This general guidance covers: <ul style="list-style-type: none"> • Types of overhead powerlines and their heights • Legal requirements • Accident prevention • Working in proximity to overhead lines connected to buildings • Emergency procedures.
Electricity at Work Regulations 1989.	The Regulations’ aim is to prevent death or injury to any person from electrical causes in connection with work activities.
Town and Country Planning (Tree Preservation) (England) Regulations 2012.	These Regulations cover Tree Preservation Orders that prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees (including the cutting of roots) without the consent of the local planning authority.

The learner must also have an awareness of the following:

- Network Rail Standard 19 Planning and Delivering Safe Working (PDSW)
- Network Rail Safety Bulletin No. 297 – Adjacent Line Open Working
- Network Rail – Lifesaving Rules
- Rail Safety and Standards Board Ltd.
- (RSSB) Rule Book, Track Workers Manual
- Railway Industry Supplier Qualification Scheme (RISQS).

Learning outcome 2 – Be able to identify types of rail infrastructure assets and their function

The learner must be able to identify different types of rail infrastructure assets, to include:

- Operational railways
- Closed railways
- Non-electrified line

- Line service by overhead lines
- Line serviced by DC lines
- Up-side/down-side bidirectional travel.

And to locate sites using:

- Sectional appendix maps
- Aerial mapping.

The learner must be able to link hazard directory information to sites.

The learner must be able to summarise access and egress arrangements and site security requirements.

The learner must be able to explain the purpose of railway infrastructure and the requirements for vegetation management.

Learning outcome 3 – Be able to understand how trees interact positively and negatively with rail infrastructure

The learner should be able to explain the significance of clearance zones detailed within NR/L2/OTK/5201, what they are designed to do and what they are designed to prevent.

The learner should be able to detail the key objectives that are described within the standard and require inspection, including:

- Encroachment
- Tree risk
- Leaf fall.

The learner should be able to summarise the risks that vegetation poses to the railway and explain how those risks are controlled, including:

- Clearance zones
- Species selection.

The learner must describe undesirable situations that would require management, such as:

- Train and track clearance zones
- Threat from high-canopy trees
- OLE clearance zones
- Sighting clearance.

The learner must explain the use of TEFs and their function, to include:

- TEF3079
- TEF3245
- TEF3077.

The learner must explain the requirements for vegetation management for different situations, including:

- Access and walkways
- Track and train
- Over-line and under-line bridges
- Stations
- Lineside cabinets and buildings
- Drainage systems
- Earthworks
- Signals and gantries
- OLE wire stanchions and masts.

Learning outcome 4 – Be able to understand the operational requirements within standard control frameworks

The learner must be able to describe access and egress arrangements and requirements where works are undertaken in situations:

- With trains running
- With trains not running.

The learner must produce a scope of works for a given site that identifies:

- Key risks when managing the removal, and mechanised or manual activities appropriate for the site conditions
- Safety factors to consider during and on completion of the work.

Learning outcome 5 – Be able to understand requirements regarding operational planning and on-site risk control

The learner must be able to explain design requirements, including:

- Obligations to protect railway and lineside assets from damage or loss of function of the asset
- Where work may identify or create unsafe conditions that threaten the performance of the railway, the environment or the duty of care to people
- Notification processes
- How to deal with public concerns and complaints
- Where tree removal is required
- The processes for using rail-mounted plant, non-rail-mounted plant and manually operated tools.

Unit title	Tree Inspection for Utility Arboriculture
Unit level	3
Unit credit value	1
Unit reference number	D/616/9522

Learning outcome The learner will:	Assessment criteria The learner can:
1 Be able to understand the safe working requirements for undertaking tree surveys and inspections.	1.1 Explain the safety considerations when undertaking tree surveys and inspections in proximity of utilities.
2 Be able to understand the legal framework relating to tree inspection and survey.	2.1 Explain the key points of legislation, regulation and guidance pertaining to tree inspection and survey.
3 Understand the significance of 'survey' as opposed to 'inspection'.	3.1 Differentiate between 'tree inspection' and 'tree survey'. 3.2 Determine the limits and scope of a survey.
4 Understand the application of a range of equipment for tree inspections.	4.1 Explain the application of a range of equipment used in tree inspections.
5 Be able to identify the signs and symptoms of tree hazards.	5.1 Explain what constitutes a safe tree. 5.2 Understand how a tree's systems function. 5.3 Understand that energy is required to keep the tree in a healthy and safe state. 5.4 Identify the mechanical symptoms of defects in the tree. 5.5 Identify the major decay-causing fungal species.
6 Understand the categorisation of risk.	6.1 Identify the factors to be considered when evaluating the risk of tree failure. 6.2 Explain the term 'target zone'. 6.3 Explain the principle of 'risk rating'.
7 Carry out tree inspections.	7.1 Explain how various parts of a tree should be systematically examined. 7.2 Systematically record data from a tree inspection. 7.3 Make recommendations for tree works based on the results of a tree survey and inspection. 7.4 Explain that the removal of a tree may be necessary to limit future risk to the utility. 7.5 Explain the nature of the tree work recommended to stakeholders.

Learning outcome 1 – Be able to understand safe working requirements for undertaking tree surveys and inspections

The learner should be able to give examples of safety factors to be considered when conducting utility tree inspections and surveys, such as:

- If using a vehicle, it must be suitably positioned with adequate warning lights
- Always work within the requirements of the organisation's generic risk assessment, and consider the specific risks of all the different sites that you monitor
- Always carry a mobile phone or radio to enable contact with colleagues in case of emergency
- Follow procedures specified in the organisation's 'lone-working' recommendations.

Learning outcome 2 – Be able to understand the legal framework relating to tree inspection and survey

The learner must be able to summarise the key points, relating to inspection and survey of trees in proximity to utilities, of the following:

- Occupiers Liability Act 1957 and 1984
- The Health and Safety at Work etc. Act 1974
- The Highways Act 1980 and Local Government (Miscellaneous Provisions) Act 1976
- The Wildlife and Countryside Act 1981
- The Town and Country Planning Act (1990) and Town and Country Planning (Trees) Regulations (1999)
- Town and Country Planning (Tree Preservation) (England) Regulations 2012.

Learning outcome 3 – Understand the significance of 'survey' as opposed to 'inspection'

The learner should be able to differentiate between a tree survey, i.e. collection of a range of generally objective (factual) information on several trees, and a tree inspection, i.e. collection of both objective and subjective (opinion-based) information about one specific tree. Subjective information would include condition, vigour, life expectancy, etc.

The learner will determine the scope of a survey and identify the information to be collected, such as:

- Position of tree (i.e. outside 16 Lewis Rd) and proximity to utility
- Species (if known)
- Size (height, spread and girth)
- Condition
- Whether action is required (and nature of works)
- Level of public access/level of risk
- Priority/urgency, based on risk.

Learning outcome 4 – Understand the application of a range of equipment for tree inspections

The learner should be aware of the application of a range of equipment that could be used in tree inspections, such as:

- Arborsonic decay detector (e.g. PiCUS tomograph)
- Micro-drills (e.g. the resistograph or SIBTEC decay detection drill)
- Fractometer
- Chlorophyll fluorescence testing.

Learning outcome 5 – Be able to identify the signs and symptoms of tree hazards

The learner should be able to explain that an 'ideal' tree is one that is a shape-optimised structure with uniform stress over its surface area and therefore has no weak spots.

The learner should be able to explain what is meant by each of the following:

- Compartmentalisation of decay in trees (CODIT)
- Mechanical self-optimisation of trees
- The Law of the Minimal Lever Arm and the strategy of flexibility
- Mass damping.

The learner should understand the relationship between potential and kinetic energy in relation to tree growth.

The learner should be able to identify a range of mechanical defects in trees, such as:

- Banana cracks
- Branch failure
- Bulges
- Cankers.

And identify the major decay-causing fungal species (using a field guide if necessary).

Learning outcome 6 – Understand the categorisation of risk

The learner will be able to state factors to be considered when evaluating the risk of tree failure, such as:

- Likelihood of tree failure
- Likelihood of impacting the target zone
- Potential consequence of impacting a target
- Time frame.

The learner will be able to explain what is meant by the 'target zone', e.g.:

- The target zone is the area in which a tree (or any part of a tree) will fall if it fails
- Target zone is typically 1.5 times tree height
- Target zone will vary with factors including the condition of the tree, ground topography, proximity and condition of adjacent trees and the weather (prevailing wind direction).

The learner will understand the principle of 'risk rating' as applied to urgency of work and frequency of inspection.

Learning outcome 7 – Carry out tree inspections

The learner should be able to explain the stages of visual tree inspection and to complete prepared forms to record site data according to the client's requirements, such as:

- Tree position
- Species
- Height
- Spread
- Age class
- Condition
- Management recommendations
- Risk rating.

6 Level Descriptors

These qualifications have been accredited at Level 2 and Level 3 respectively, which means that upon achieving the qualifications, it can be relied upon that the learner possesses skills or knowledge appropriate to the following descriptors.

Level	Knowledge descriptor: The learner...	Skills descriptor: The learner can...
3	Has factual, procedural and theoretical knowledge and understanding of a subject or field of work to complete tasks and address problems that, while well defined, may be complex and non-routine; can interpret and evaluate relevant information and ideas; is aware of the nature of the area of study or work; is aware of different perspectives or approaches within the area of study or work.	Identify, select and use appropriate cognitive and practical skills, methods and procedures to address problems that, while well defined, may be complex and non-routine. Use appropriate investigation to inform actions. Review how effective methods and actions have been.

7 How Is This Qualification Delivered?

In order to deliver this qualification, you will need to be a Lantra-approved provider. Details of how to become an approved provider are available from our sales team. Please contact them at sales@lantra.co.uk.

Learners must be registered via Quartzweb. Details of this process are available in the Quartzweb user guide. Providers must submit the required information for learner registration. Learners should be registered for the qualification once they have been enrolled with the provider. Failure to register learners may result in assessments not taking place. Sanctions may be imposed on providers if learners are not registered before the assessment takes place.

Learners will complete the necessary elements of the assessment and be assessed by a Lantra assessor. Providers are required to compile and send the assessment paperwork (assessment report form, certificate claim form, learner registration and assessment report form) to Lantra.

Providers are not required to send learner evidence to Lantra; it should be retained by the provider. However, Lantra reserves the right to request to see learner work as part of the quality assurance process, so this should be retained and filed so that it can be easily located.

7.1 Delivery in the UK

The specification for this qualification is approved for delivery in the United Kingdom. Ofqual regulates the Qualifications in England, and they are accredited qualifications on the Regulated Qualifications Framework (RQF). They have been accredited with the following Qualification Accreditation Numbers (QAN):

- Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor, 603/3100/8

Regulated qualifications are subject to regular reviews to ensure their ongoing regulatory compliance and also to ensure that, throughout the life cycle of the qualification, the content remains relevant and current.

When the qualification is deemed to be no longer suitable – for example, technology has moved on and working practices are no longer relevant – Lantra will advise providers of a qualification end date. The end date is for the end of registrations. Any learners registered before this date will be allowed time to complete the qualification. For this qualification, that period will stand as six months.

Although RQF qualifications are not regulated in Scotland, they are available to anyone who wishes to take them. Lantra makes no distinction between providers and learners in Scotland and those elsewhere.

7.2 Who can deliver this qualification?

Only approved Lantra providers can deliver this qualification. For information on becoming an approved provider, please contact Lantra at sales@lantra.co.uk or on 024 7669 6996.

7.3 Provider resources

While the Lantra Awards Level 3 Award in Utility Arboriculture – Surveyor, is predominately a knowledge-based assessment, there are elements that require significant practical assessment. Providers will need to ensure that, at the assessment venue, there is an area of utility with sufficient tree cover to enable the survey activities to be completed and the requisite permissions for the planned work to be completed.

7.4 Quality assurance and certification

7.4.1 Quality assurance of assessment decisions

This qualification is externally assessed and externally quality assured. This means that Lantra will provide an assessor to the provider to assess learners and complete assessment paperwork. Lantra will be responsible for ensuring that assessors are standardised and will carry out monitoring of the assessor's assessment decisions.

Occasionally, as part of Lantra's ongoing quality assurance strategy, an EQA may accompany the assessor to observe the assessment processes followed by the assessor. The EQA may further be accompanied by either Lantra staff or another EQA, to ensure that the EQA is following the correct processes.

7.4.2 Claiming certification

As part of the assessment documentation that is submitted, providers will need to complete a certificate claim form and submit it to Lantra to process certificates following quality assurance approval.

Once a learner has completed the assessment requirements and quality assurance has taken place, certificates will be issued by Lantra for providers to distribute to individual learners.

7.4.3 Skills identity card

If the learner requires a skills identity card, they must supply the provider with one passport-style photograph. The provider must verify that the photograph is of the learner being assessed by signing the back of it. Alternatively, suitable photographs can be taken by the provider using a digital camera and emailed to qualifications@lantra.co.uk. Please note, a high-resolution image must be used and cannot be cropped or cut out from a larger image.

The submission of the photograph must contain a declaration, either on the back or within the email, confirming that the image is of the learner, using these words: 'I certify that this is a true likeness of [learner's full name]'. Where a digital image is provided, the email should also include the provider name, qualification title, order ID and date of assessment.

Lantra requires the file name of the photograph to be the learner's name and date of assessment, so that it can be easily reconciled with other assessment paperwork, e.g. joe_bloggs_010117. Images that do not conform to this convention may result in a delay in the card being issued.

7.4.4 Replacement certification and skills ID card

If a learner loses the original certificate or skills ID card, Lantra can issue a replacement. The learner will need to provide proof of identity (for example, a passport or driving licence) and the details of the provider with which they were registered. Lantra will check all claims for replacement certificates against the original certificate claim form. The provider may be contacted for authentication. The certificate will be marked as a replacement. A fee is payable for replacement certificates and skills ID cards. Please contact Lantra for the current fee.

7.5 Enquiries about results and appeals

Lantra has a policy for enquiries about results and an appeals procedure which can be used under circumstances where a learner or provider has reason to believe that there has been an error in either the administrative processes leading to an incorrect qualification award or there has been an issue in the assessment of the learner. Fees payable for enquiries about results will be refunded in full if the enquiry is upheld or if a learner's results are changed as a result of an enquiry.

Appeals can be made following the outcome of an enquiry about results if the learner/provider remains unhappy with the outcome or has further grounds to query the decision. Please note that appeals will not be accepted without a paid result enquiry being submitted first.

Providers must ensure that learner consent is obtained prior to an enquiry about a result being submitted. Learners must be informed that assessment outcomes can change both positively and negatively.

Please refer to the provider handbook for more details.

7.6 Malpractice and maladministration

Where malpractice is suspected, especially where there is doubt about the integrity of the assessment process, Lantra will immediately suspend further certification claims while an investigation is carried out. The regulatory authorities will be notified of any investigations and their outcome.

The claimant will be required to provide information about the suspected malpractice and the circumstances surrounding the matter. Malpractice, if found, may result in sanctions being imposed on the provider, certificates being revoked or even providers being barred from Lantra membership and reported to regulatory authorities.

Maladministration is linked to malpractice and can result in a malpractice investigation being launched, where the maladministration could impact on the credibility of the assessment taking place or the outcomes achieved – for example, the failure to investigate suspected malpractice when asked to do so by Lantra.

Please refer to the Lantra malpractice and maladministration policy for more details.

7.7 Recognition of prior learning

Recognition of prior learning (RPL) is defined as ‘a method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a qualification through knowledge, understanding or skills they already possess and do not need to develop through a course of learning’.

It is important that providers make it clear to learners that the RPL process is associated with how the learner has acquired the knowledge, understanding or skills; it does not mean that the learner will be exempt from the assessment.

It is the responsibility of the assessor to decide whether evidence provided by the learner is valid, reliable and current and meets the relevant assessment criteria. Where the assessor decides that the RPL does meet the assessment criteria, this must be clearly signposted in the tracking documentation.

It is recommended that providers refer to the provider handbook for more information on the implementation of RPL.

Where learners already hold the Level 2 Award in Aerial Tree Pruning, they will not need to complete the carrying out of aerial pruning of a tree unit. Evidence is to be provided to Lantra when claiming certificates.

7.8 Safeguarding – young people and vulnerable adults

This qualification can be offered to learners in the 16-19 age group, as well as learners aged 19+. The Health and Safety at Work Act 1974 requires employers to ensure the health, safety and welfare at work of their employees and for providers to safeguard learners. Young people under the age of 18, and vulnerable adults, can be exposed to risk when using work equipment due to immaturity, lack of experience or lack of awareness of existing or potential risks. Therefore, young people and vulnerable adults may need closer supervision.

For more information about young people at work, see the Management of Health and Safety at Work Regulations 1999.

7.9 Additional requirements and reasonable adjustments

Providers are expected to make appropriate arrangements, including reasonable adjustments, as detailed in the equality and diversity policy within the provider handbook, to ensure that learners with additional needs can access assessment wherever possible. The equality and diversity policy covers alternative assessment arrangements that can be made for learners.

Reasonable adjustments must not, however, result in a change to the learning outcomes and assessment criteria.

A provider must apply for reasonable adjustments to Lantra using the **reasonable adjustments request form**. Lantra recommends that reasonable adjustment requests are submitted no later than six weeks prior to the assessment taking place to allow a decision about their suitability to be made before the assessment. However, Lantra recognises that this may not always be possible, and will do its best to process requests received after this point. Please note that no reasonable adjustment should be implemented without the prior approval of Lantra.

8 What Does a Provider Need to Do?

8.1 Management support

Experience has shown that qualification programmes run more effectively when given support by senior management. This can be achieved by appointing a person from the senior management team, or a designated qualification manager, and ensuring they are given the authority to monitor the quality management systems for the programme and to implement any required changes. This role is separate from the required role of IQA.

Management support can be demonstrated by ensuring that appropriate team members are allocated to the programme and given sufficient time and resources to carry out their role(s) effectively.

8.2 Provider records

Providers are required to retain learner records which include the details listed below. Providers may already have their own systems that could be used to store records. Provided that the information is accessible and conforms to the requirements below, no new record systems will be needed. Lantra does not prescribe the format in which records are kept.

Provider records must include:

- Data about individual learners, including any reasonable adjustments
- Learner registration
- Achievement of units
- Feedback given to learners by assessors.

All records must be stored securely to avoid being falsified or fraudulent claims being made. All assessment records must be retained at the provider for at least **three years** after the learner has completed the assessment. If the programme is subject to an EQA quality assurance visit or approval sign-off, the records should be retained for three years after this date. It is the responsibility of the provider to ensure that data is cleansed at the appropriate time.

There is no prescribed format for these records and providers may wish to incorporate them into documentation they already maintain within their own organisation. If the provider already works to quality management systems such as the SQMS, the ISO9001 series or is required to maintain records for government-funded training schemes, that documentation will almost certainly provide an adequate basis for assessor records.

Providers may also need to adhere to separate requirements, where appropriate, with regard to the retention of records, such as those for funding applications. Please refer to the specific requirements of the funding agency.

8.3 Support for learners

Learners will need to follow an induction programme when enrolled on the qualification. This should be designed around a particular element or unit of the qualification so that they become familiar with the way the qualification operates.

Many learners, particularly if they are mature adults, will already have pre-existing skills and knowledge. A system will need to be introduced to identify these skills and how evidence from prior achievements can be recorded (see Section 7.7 Recognition of prior learning).

Throughout the programme, tutors and/or instructors should aim to provide feedback to learners on how they are progressing through the qualification to ensure that on the day of the assessment they are ready for the requirements of the question paper and the practical assessment. Feedback should be positive, constructive and used to inform future planning.

Some providers will have staff working in education support; in others, assessors may offer this support. It is important each learner has appropriate guidance and is directed towards additional information as required. Guidance on career opportunities may also be appropriate.

Learners with particular characteristics may need additional support from the provider/instructor. Refer to Lantra's equality and diversity policy for more information relating to reasonable adjustments and special considerations. Learners with certain protected characteristics should not be discriminated against or prohibited from assessment where adjustments can be made to the assessment evidence requirements that would allow them to demonstrate competence or knowledge in different ways.

Learners must be informed when they have been registered on a qualification. It is also a regulatory requirement that Lantra is informed if a learner withdraws from the qualification after they have started. In addition, providers must ensure that learners are informed when they have been withdrawn from a qualification for any reason and retain evidence of this decision.

Learners will not be recognised by Lantra until they have been registered and Lantra will have no obligation to the learners if there is a problem with them completing the qualification, such as the provider ceasing to operate.

If for any reason a provider is not intending to renew their membership while they still have uncertified learners registered on a qualification, regulatory requirements stipulate that learner interests must be maintained. The provider may choose to transfer learners to another awarding organisation or the provider will still be required to complete the assessment of learners with Lantra and pay any fees that are due for quality assurance or certification.

9 Administration and Other Important Information

9.1 Administration process for registration and certification

The Quartzweb user guide contains instructions on how to register learners.

Learners may transfer registration from one unit/qualification to another, provided they are both offered by Lantra. This will incur an administration fee. If the registration fee is higher for the subsequent qualification, providers will be invoiced for the difference. No refunds will be made if the registration fee for the subsequent qualification is lower. Learners transferring to a different provider must re-register with the new provider. Lantra may need to charge an administration fee to the learner's new provider.

Learners must be informed when they have been registered onto the qualification.

9.1.1 Registering the learner

Learners **must** be registered for the qualification prior to an assessment taking place. Please refer to the Quartzweb user guide for details on how to register learners.

For each learner, the surname/family name, first name, date of birth and postcode are mandatory. The date of birth is important to distinguish between learners with the same name. Awarding organisations are required to provide data to the regulatory bodies about learner characteristics, which is why Lantra asks you to provide details of their gender, ethnic origin and whether they have requested any reasonable adjustments. This is so that achievements can be monitored for equal opportunities purposes and to ensure that fair access to training and qualifications is achieved.

9.1.2 Certificate claims

Certificates can only be claimed for learners who are registered on Quartzweb. All certificate claims are checked against provider approval records and learner registration records. Certificates will not be issued for learners who are not registered prior to the assessment taking place.

The learner name entered on Quartzweb is how it will appear on the certificate.

9.1.3 Regulatory authorities

Occasionally, Ofqual (the qualification regulator) may visit providers and require access to premises, meetings, learner assessment records, internal verification records, documents, data, learners and staff. If providers refuse access, Lantra will be required to suspend all future certificate claims until the requirements of the regulatory visit have been satisfied.

9.2 Assessment strategy

For these qualifications, an assessment guidance document is available. Full details of the assessment requirements are contained within. Below is a summary of the assessment strategy which supports these qualifications. The assessment guidance contains details on:

- Methods of assessment
- Types of evidence that may be suitable
- Key safety and technically critical aspects.

Providers and assessors must ensure that they are familiar with the specifications and requirements of the qualification.

Unit and qualification assessment requirements set out the scope of evidence required in terms of equipment, services, statutory regulations and industry standards and systems.

Methods of assessment:

- Observation of practical activities
- Verbal questioning.

Assessment requirements:

- For practical observations, competence must be demonstrated and evidenced
- The assessor may decide that more observations are required to ensure that all assessment criteria have been met
- Assessors must be capable of identifying when competence has been demonstrated by the learner, based on their own professional judgement
- The evidence is sufficient when the assessor judges the requirements of the qualification have been met and competence has been demonstrated by the learner
- Although there are no formal limits set on the time taken to complete the qualification or the number of assessment opportunities provided, providers may wish to set guidelines for the length of time or amount of tuition offered to learners for financial or logistical reasons, taking into account the stated key safety and technically critical aspects of the assessment. It is estimated that the practical assessment would take approximately two hours, depending on the learner.

Access to assessment:

- Learners should not be put forward for an assessment until they are deemed ready to be assessed
- This can be evidenced by conducting an evaluation of the learner's previous training and experience
- This underpins the assumption that the learner has sufficient technical expertise, knowledge, skill and maturity to meet the assessment requirements
- Key considerations for evaluation of the learner's previous training and experience include:

- Health and safety considerations
- Knowledge of arboricultural and utilities legislation.

9.3 Funding

Approved qualifications may be eligible for funding from either the Education and Skills Funding Agency or the Skills Funding Agency, or equivalent bodies in Wales and Northern Ireland. The qualification is listed on the Ofqual Register of Regulated Qualifications and the Learning Records Service. Funding may be available to organisations that meet the requirements of the relevant agency.

In order that the funding may be linked to the learner, a unique learner number (ULN) must be provided. The ULN should be entered in the ULN field when registering the learner on Quartzweb. For information on how to obtain ULNs for your learners, please refer to the Learning Records Service guidance available at www.gov.uk/government/publications/lrs-unique-learner-numbers

9.4 Feedback, compliments and complaints

Lantra recognises that, from time to time, providers, learners, assessors and other personnel may have reason to provide feedback on a process or have grounds for a complaint. Lantra also welcomes compliments when aspects of its courses have been well received, so that it can seek to implement best practice across its suite of products. The Lantra feedback, compliments and complaints procedure is published on the Lantra Awards website.

Appendix 1 – Glossary of Terms

Knowledge	Factual information that can be recalled as required. The individual can identify and/or describe key information that is relevant to the subject area, for example.
Understanding	The application and extension of knowledge allowing organised thought; the generation of original ideas and critical thinking. The individual can explain, analyse and/or evaluate, for example.
Skill	The application of knowledge and/or understanding in a practical context demonstrating practical competency. The individual can operate, use and/or carry out, for example.
Learning outcome	How the learner will be changed by the learning and assessment process – that which the learner will, due to learning experiences, newly know, understand or be able to do.
Assessment criteria	Discreet criteria which holistically deliver on the promised objective of the qualification and which must all be evidenced to a unified (and/or graded) standard.
Breadth (exemplification)	Presents the provider with exemplar teaching content which helps define the minimum required breadth of learning. It guides but does not prescribe: learning should always be broader than any potential assessment.
Depth (amplification)	Presents the provider with the required minimum teaching content and defines the depth of understanding required for the level and objective of the qualification.
Qualification objective	A succinct summation of the overarching development of the learner in terms of tangible work or further developmental opportunities available as a result of achieving this qualification.
Qualification aim	A succinct summation of why this qualification is of value to the learner (without reference to assessment).
Transferable	Knowledge, understanding or skills that can be applied beyond the context in which they were taught to benefit the learner in different job roles, industries, contexts and/or personal situations.
Assessment guidance	Guidance used to advise centres on a general level of expectation, rather than to prescribe a definitive list of evidence.
Delivery guidance	Guidance that, without reference to assessment, illustrates opportunities for evidence which might: <ul style="list-style-type: none"> • Be naturally generated through the learning process • Offer innovative examples of delivery gathered through centre/learner consultation • Minimise the burden of assessment on centres and learners.
Guided learning hours	Approximate number of hours under immediate guidance or supervision of a lecturer, supervisor, tutor or teacher.
Directed study	An estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike guided learning, not under the immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.
Total qualification time	Guided learning hours + directed study

	Total qualification time is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to demonstrate achievement of the level required for award of a qualification.
Arrangements for reasonable adjustments	Adjustments made to the assessment for a qualification so as to enable a learner with additional requirements to demonstrate his/her attainment to the level required.
Arrangements for special consideration	Special consideration might be given to a learner who has temporarily experienced an illness or injury, or some other event outside of their control, which has had a material effect on their ability to take an assessment or demonstrate attainment.
Recognition of prior learning	A method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.

Appendix 2 – Census Ethnic Group Classifications (2011)

Please use the following code(s) to indicate ethnicity when completing the learner registration.

England and Wales		Northern Ireland		Scotland	
01	White: English/Welsh/Scottish/ Northern Irish/British	19	White: White	30	White: Scottish
02	Irish	20	Irish Traveller	31	British
03	Gypsy or Irish Traveller	21	Asian/Asian British: Indian	32	Irish
04	Any other White background	22	Pakistani	33	Any other White background
05	Mixed/multiple ethnic groups White and Black Caribbean	23	Bangladeshi	34	Mixed: Any mixed/multiple Ethnic background
06	White and Black African	24	Chinese		Asian, Asian Scottish or Asian British:
07	White and Asian	25	Black, Black Irish or Black British: Black Caribbean	35	Indian
08	Any other Mixed/multiple ethnic background	26	Black African	36	Pakistani
09	Asian/Asian British: Indian	27	Black other	37	Bangladeshi
10	Pakistani	28	Mixed: Mixed ethnic group	38	Chinese
11	Bangladeshi	29	Other ethnic group: Any other ethnic group	39	Any other Asian background
12	Chinese			40	Black, Black Scottish or Black British: Caribbean
13	Any other Asian background			41	African
14	Black/African/Caribbean/ Black British: African			42	Any other Black background
15	Caribbean			43	Other ethnic group: Any other ethnic group
16	Any other Black/African/ Caribbean background				
17	Other ethnic group: Arab				
18	Any other ethnic group				

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