



City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (0038-32)

March 2022 Version 1.1

Qualification Handbook

Qualification at a glance

Industry area	Arboriculture
City & Guilds number	0038-32
Age group	18+
Entry requirements	<p>Candidates must have achieved Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30) and Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31) or equivalent qualifications.</p> <p>Centres must ensure that any pre-requisites stated are met.</p>
Assessment	<p>To gain this qualification, candidates must successfully achieve the following assessments:</p> <ul style="list-style-type: none"> One to one practical assessment with oral questioning by an NPTC City & Guilds approved assessor
Grading	Pass only
Approvals	<p>Full centre approval</p> <p>Qualification approval</p>
Support materials	n/a
Registration and certification	Registration and certification of this qualification is through the Walled Garden and is subject to end dates.

Title and level	Size (GLH)	TQT	City & Guilds qualification number	Ofqual accreditation number
City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning	8	10	0038-32	603/7887/6

Version and date	Change detail	Section
1.0 December 2021	First version	
1.1 March 2022	Topic 1.3 amended to 'All PPE should conform to latest standards'	4

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1 Introduction

Purpose of this qualification?

The following purpose is for the **City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (603/7887/6)**.

Area	Description
OVERVIEW	
Who is this qualification for?	Individuals who operate around utility services as part of their work in arboriculture, forestry, or other industries. It will provide the individual with the knowledge, understanding and skills required to carry out ground-based pruning within the utility arboriculture sector.
What does this qualification cover?	It covers Hazards, risks, controls, emergency procedures, site specifics and tree categories, Electrical methods of work ground-based pruning.
WHAT COULD THIS QUALIFICATION LEAD TO?	
Will the qualification lead to employment, and if so, in which job role and at what level?	This qualification will support progression into employment, where working around utility services is part of the role. Safe operational skills are key to efficient use, good working practice and preventing accidents, leading to business benefits in terms of less machinery damage and down time.
Why choose this qualification over similar qualifications?	This is a specialist qualification demonstrating the individual can safely carry out duties associated with working around utility services to a recognised level of competency.
Will the qualification lead to further learning?	Individuals who successfully complete this qualification could go on to increase their level of proficiency through consolidation practice within a working environment or develop other skills within the Utility Arboriculture suite of qualifications.
WHO SUPPORTS THIS QUALIFICATION?	
Employer/Higher Education Institutions	The Arboricultural Association
FURTHER INFORMATION	Please refer to the City & Guilds NPTC website, for more information on the assessment.

Qualification structure

For the **City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (0038-32)** learners must be trained and assessed in the unit listed below.

Unit number	Unit title	GLH
Learners must achieve		
303	Utility arboriculture ground-based pruning	8

2 Centre requirements

Approval

New centres will need to gain centre approval. Existing City & Guilds centres who do not currently offer this qualification must go through the Qualification Approval (QAP) process. For centres currently offering City & Guilds Level 3 Certificate of Competence in Utility Arboriculture (UA10 Unit UA2.2) there is a Fast Track method of approval. Please email qasupport@cityandguilds.com for further information on the approval process

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following requirements:

- be technically competent in the areas in which they are delivering
- be able to deliver across the breadth and depth of the content of the qualification being taught
- have recent relevant teaching and assessment experience in the specific area they will be teaching, or be working towards this
- demonstrate continuing CPD.

Physical resources

Centres must be able to demonstrate that they have access to the equipment and technical resources required to deliver this qualification and its assessments.

Assessment Guidance for the Assessor

Staff assessing these qualifications must be approved Certificate of Competence City & Guilds NPTC Assessors and must be independent **and cannot have been involved with the training of the Candidate**. This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body.

Certificate of Competence City & Guilds NPTC Assessors must meet the following requirements:

- show competence and provide evidence of industry expertise in the qualification/s they wish to assess
- hold the qualification as a candidate and have been technically evaluated as an Assessor
- be up to date with their verification and relevant first aid
- demonstrate continuing technically relevant CPD

Compliance with these requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness and approved Assessors will be subject to a regular visit by the Verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved Quality Consultant.

Safe Practice

Appropriate PPE must be worn at all times

All equipment must be operated in such a way that the Candidate, Assessor, other persons, animals or other equipment are not endangered.

If these conditions are not observed this will result in the Candidate not meeting the required standard.

Validation of Equipment

Any item(s) of equipment used for the assessment must comply with current legal requirements.

Additional information may be sought from the relevant manufacturer's instruction book, operators' manual, product label/database or any other Government/Government Agency publication.

Age restrictions

This qualification is approved for learners aged 18+.

3 Administration

Approved centres must have effective quality assurance systems to ensure valid and reliable delivery and assessment of qualifications. Quality assurance includes initial centre registration by City & Guilds and the centre's own internal procedures for monitoring quality assurance procedures.

Consistent quality assurance requires City & Guilds and its associated centres to work together closely; our Quality Assurance Model encompasses both internal quality assurance (activities and processes undertaken within centres) and external quality assurance (activities and processes undertaken by City & Guilds).

External quality assurance

City & Guilds will undertake external moderation activities to ensure that the quality assurance criteria for this qualification are being met. Centres must ensure that they co-operate with City & Guilds staff and representatives when undertaking these activities.

City & Guilds requires the Head of Centre to

- facilitate any inspection of the centre which is undertaken on behalf of City & Guilds
- make secure arrangements to receive, check and keep assessment material secure at all times, maintain the security of City & Guilds confidential material from receipt to the time when it is no longer confidential and keep completed assignment work and examination scripts secure from the time they are collected from the candidates to their dispatch to City & Guilds.

Malpractice

Please refer to the City & Guilds guidance notes *Managing cases of suspected malpractice in examinations and assessments*. This document sets out the procedures to be followed in identifying and reporting malpractice by candidates and/or centre staff and the actions which City & Guilds may subsequently take. The document includes examples of candidate and centre malpractice and explains the responsibilities of centre staff to report actual or suspected malpractice. Centres can access this document on the City & Guilds website.

Examples of candidate malpractice are detailed below (please note that this is not an exhaustive list):

- falsification of assessment evidence or results documentation
- plagiarism of any nature
- collusion with others
- copying from another candidate (including the use of ICT to aid copying), or allowing work to be copied
- deliberate destruction of another's work
- false declaration of authenticity in relation to assessments
- impersonation.

These actions constitute malpractice, for which a penalty (e.g., disqualification from the assessment) will be applied.

Where suspected malpractice is identified by a centre after the candidate has signed the declaration of authentication, the Head of Centre must submit full details of the case to City & Guilds at the earliest opportunity. Please refer to the form in the document *Managing cases of suspected malpractice in examinations and assessments*. Alternatively, please complete the form, JCQ/M1. Copies of this form can be found on the JCQ website: <http://www.jcq.org.uk>

Access arrangements and special consideration

We have taken note of the provisions of equalities legislation in developing and administering this specification.

We can make arrangements so that candidates with disabilities, special educational needs and temporary injuries can access the assessment. These arrangements must be made before assessment takes place.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the *JCQ access arrangements and reasonable adjustments and Access arrangements - when and how applications need to be made to City & Guilds* for more information. Both are available on the City & Guilds website: <http://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library/policies-and-procedures/access-arrangements-reasonable-adjustments>

Special consideration

We can give special consideration to candidates who have had a temporary illness, injury or indisposition at the time of the examination. Where we do this, it is given after the examination.

Applications for either access arrangements or special consideration should be submitted to City & Guilds by the Examinations Officer at the centre. For more information, please consult the current version of the JCQ document, *A guide to the special consideration process*.

Language of examinations

City & Guilds has a responsibility to ensure that candidates can be assessed in the following languages only:

- English
- English in Northern Ireland
- English in Wales.

4 Units

Unit 303

Utility arboriculture ground-based pruning

Level:	3
GLH	8

What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to carry out ground-based pruning within the utility arboriculture sector.

Learning outcomes

In this unit, learners will be able to

1. Carry out utility arboriculture ground-based pruning

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Carry out utility arboriculture ground-based pruning

Topics:

- 1.1 Hazards, risks, controls, emergency procedures, site specifics and tree categories
- 1.2 Electrical methods of work
- 1.3 Ground-based pruning

Topic 1.1

Identify hazards, risks, and controls relevant to the site task and equipment.

Emergency procedures relevant to the work site may include:

Generic emergency procedures

- Site address
- Grid reference
- What 3 words
- Designated meeting place
- Nearest access/egress point
- Street name/district
- Type of access
- Suitable helicopter landing area
- Location and phone number of nearest accident and emergency hospital
- Works manager contact details
- Site contact number
- Other

Electrical emergency procedures

- Number to contact the DNO emergency control room
- Feeder name
- CMR (circuit map reference)
- Circuit name/number
- Line code
- Tower base reference
- Transformer name/number
- Pole name/numbers
- Other

Information required regarding site arrangements to check prior to commencing work may include:

- Network operator aware of team location and operations
- Correct site /network location
- The required consents/ permissions are in place for works that are planned
- All required tools are available
- Tools and equipment in serviceable condition
- Staff competencies appropriate for the scheduled work

- Plan of work agreed with co-worker(s)
- Other

Additional site-specific electrical hazards that may need to be considered as part of the electrical risk assessment may include:

- Network voltage identified
- Live and vicinity zone measurements agreed
- Overhead line inspected for defects
- Branches to be pruned identified and tree categories agreed
- Awareness of danger from equipment coming into contact with the live line
- Requirement for goalposts and warning barriers in line with GS6 if machinery and vehicles pass under or adjacent to overhead lines

Tree categories

Category A:

- Trees within the vicinity zone (including the live zone) at or above the level of conductors or associated equipment

Category B:

- Trees outside but capable of breaching the vicinity zone (including the live zone) adjacent to conductors or associated equipment

Category C:

- Trees within the vicinity zone (including the live zone) that are beneath the conductors or associated equipment

Category D:

- Trees outside the vicinity zone with no potential of breaching the vicinity zone

Document for reference:

- G55

Topic 1.2

Procedures for category A trees:

With the line live the method of work should be established by incorporating the following control measures:

- Where the voltage is greater than 33kV then the works will be carried out dead. The only exception to this will be where no branches breach the Live Zone and there is further supervision and a method statement approved by the Network

Operator that ensures there is no breach of the Live Zone.

- Branches can be reduced by using approved Insulated Tools.
- Approved Insulated Tools may only be allowed to be used in the Live Zone where a procedure approved by the Network Operator is in place.
- If branches protrude through the Vicinity Zone and up above the height of the Vicinity Zone and overhang the extent of the Live Zone, then the works will be carried out dead.

- Where Approved Insulated Tools or any cut materials have the potential to cause a phase to phase or phase to earth flash over, then the length of cut section must be determined by risk assessment and recorded: particularly considering distances between phases
- A dedicated lookout grounds person capable of stopping work will be required to ensure that the control measures are being adhered to
- Works must be planned such that contact with electrical equipment is avoided.
- The saw head should not be used in the Live Zone or on thin branches less than 25mm diameter that protrude into the Live Zone; this prevents excessive movement and unintentional contact of branches with conductors.

Procedure for category B trees:

With the line live the method of work should be established by incorporating the following control measures:

- In the circumstance where there is extensive overhang which cannot be removed using an approved method over the live zone then works shall be carried out dead
- full account of the weather conditions must be taken
- control measures should, where necessary, include preparatory work to remove branches in a logical manner to avoid the risk of small branches cut higher up in the crown outside the vicinity zone bouncing or cartwheeling onto the line
- if branches have the potential to breach the live or vicinity zone, then only small sections should be removed to avoid a phase-to-phase contact or damage to the network, the maximum length of cut section should be recorded on the risk assessment and a dedicated observer capable of stopping work must be used
- Straight fell trees away with appropriate control measures (such as the use of a non-return system) to ensure no breach of the Vicinity Zone. The suitability of any such procedures must be approved by the Network Operator.

Procedure for category C trees:

With the line live the method of work should be established by incorporating the following control measures:

- Remove branches in the live zone with approved insulated tools
- If the trees are below the level of the Live Zone, with no possibility of breaching the Live Zone then they may be felled or pruned with non-insulated tools such as a chainsaw.
- If the tree to be felled is below the level of the Live Zone, but has a possibility of breaching the Live Zone, then remove the branches with Approved Insulated Tools prior to felling.

Procedure for category D trees:

With the line live the method of work should be established by incorporating the following control measures:

- Use non-insulated tools and avoid any breach of the vicinity zone by operatives, tools, or equipment

Topic 1.3

Identification of the condition and potential defects of the overhead line may include:

- Overhead line inspected for defects

- Broken or damaged conductors
- Irregular spacing of conductors
- Ground clearance
- Damaged or rotten poles
- Condition of stays
- Other

Inspection and assembly of insulated rods to include:

- Approved by network operator for work to be carried out
- Checked, inspected, and assembled
- Joints fit securely
- Voltage rating checked
- Unique identification numbers checked
- Date of inspection checked
- Understand and ensure the effectiveness of insulated inserts is maintained
- Number of rods appropriate for the task

The minimum number rods required for working up to 11kv and up to 33kv are:

- 3 rods (LV and 11kv)
- 4 rods (33kv)

Factors to consider for the use, care and maintenance of insulated rods may include:

- Insulated rods are only approved for voltages up to 33kv
- Dirty rods cleaned externally and internally with rod brush or warm soapy water
- Damaged or defective rods to be withdrawn from service labelled as defective and scrapped
- Use of silicone wipes/cloth to ensure that water beads and runs off
- Rods to be examined and tested at regular intervals by a suitably authorized person
- Results to be recorded and tools marked with most recent test date or next test date
- Tools to be stored in a dry, clean environment and in a position which will prevent scratching or damage

Various insulated rod attachments that are used when pruning may include:

- Pruning/lopping head is used on twigs and branches less than 25mm in diameter
- Pruning saw is used on branches over 25mm in diameter
- Control hook is used by an assistant to steady, lift or pull branches being pruned, or is used to place a pull-rope over a branch
- Other

Select and wear Personal Protective Equipment as appropriate:

- High visibility clothing
- Head protection
- Eye protection
- Hand protection
- Foot protection
- Hearing protection
- Specialist equipment as specified by the network operator

- All PPE should conform to latest standards

The use of appropriate cuts when undertaking pruning operations may include:

- Control the cut section
- Prevent tearing or ripping of the bark
- Ensure the final (target) pruning cut can be carried out precisely
- Other

Reasons for correct target pruning may include:

- Preserves the branch bark collar and trees' defenses against decay
- Allows the wound to callus over
- Stubs and flush cuts allow decay to enter
- Stubs and flush cuts encourage sprout growth
- Stubs and flush cuts leave tree looking unsightly
- Other

Use pruning/ lopping head with insulated rods in close proximity to electrical apparatus:

- Insulated rods assembled
- Insulated insert correctly positioned in the pulling cord
- Plan of work agreed with a co-worker to pull cord as required
- Pruning head positioned to avoid risk of conductor clashing or flash over
- Ensure that there is good positive communication prior to and during pruning operations
- Twigs and branches cut at pre- determined lengths to avoid the risk of a flash over
- Control hook can be used with a second set of insulated rods by an assistant to steady, lift or pull branches being pruned.
- Longer lengths of branches can be cut if they will not either hang up on the line or cause a flashover
- Selected branches pruned to give the specified clearance from the overhead line
- Awareness of requirement to undertake risk assessment to ensure no damage to overhead line where branches go through a line
- Dedicated electrical observer/ lookout used as appropriate to the situation
- Permission for the removal of any branches hung up on the line must be obtained from the network operator
- Awareness of need to clean rods/insulators to ensure all contamination is removed if laid on ground during operations
- Rods inspected for damage on completion of operation

Use pruning saw with insulated rods in close proximity to electrical apparatus:

- Insulated rods assembled
- Plan of work agreed with a co-worker if pruning hook or pull rope is used
- Co-worker instructed to use insulated rods and control hook to ensure the branch falls outside the vicinity zone, if appropriate
- Saw position near to the base of the branch to prevent bouncing/ whipping
- Side/ undercut made, release cut made, final pruning cut made
- Branches pruned to intersections for directional pruning
- Branches cut in sections to avoid risk of flash over, damage to conductors or apparatus or clashing of conductors
- Pruning saw positioned to avoid risk of conductor clashing or flash over

- Selected branches pruned to give the specified clearance from the overhead line
- Cut sections prevented from being caught on the overhead line
- Ensure the saw head is not used in the live zone
- Ensure the saw head is not used on branches less than 25mm into the live zone

All waste produced is disposed of in line with legislation, good practice, and site requirements.

Communication between team members maintained when appropriate.

Pruning specifications executed as per industry good practice and job specification.

All tools, equipment and personal protective equipment is used in line with industry good practice.

It is ensured that any possible environmental damage is always minimised.

All activities must be completed in a way which protects the operator and those around them.

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on www.cityandguilds.com.

City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to all UK centres working with City & Guilds:

- Ofqual's General Conditions of Recognition

The **centre homepage** section of the City & Guilds website also contains useful information on

- **Walled Garden:** how to register and certificate candidates online
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

Useful contacts

UK learners General qualification information	E: learnersupport@cityandguilds.com
International learners General qualification information	E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	E: information@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com

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