



City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Aerial Pruning (0038-33)

December 2021 Version 1.0

Qualification Handbook

Qualification at a glance

Industry area	Arboriculture
City & Guilds number	0038-33
Age group	18+
Entry requirements	<p>Candidates must have achieved:</p> <p>Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30)</p> <p>Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)</p> <p>Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (0038-32)</p> <p>Level 2 certificate of competence chainsaw maintenance and cross-cutting (0039-20)</p> <p>Level 2 Certificate of Competence in Felling Small Trees up to 380mm (0039-21)</p> <p>Level 2 Certificate of Competence in Climbing and Aerial Rescue (0039-22)</p> <p>Level 2 Certificate of Competence in using a Chainsaw from a Rope and Harness (0039-23)</p> <p>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 Aerial Pruning	8	10	0038-33	603/7888/8

Version and date	Change detail	Section
1.0	First version	

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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 Aerial Pruning (603/7888/8)**.

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 aerial pruning within the utility arboriculture sector.
What does this qualification cover?	It covers Hazards, risk, controls, emergency procedures, industry guides and potential environmental damage, Site zoning, tree condition assessment, working at height assessment Tree factors and characteristics and Aerial tree 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 Aerial Pruning (0038-33)** learners must be trained and assessed in the unit listed below.

Unit number	Unit title	GLH
Learners must achieve		
304	Utility arboriculture aerial 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 UA2.3) 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 (eg 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 304

Utility arboriculture aerial 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 aerial pruning within the utility arboriculture sector.

Learning outcomes

In this unit, learners will be able to

1. Carry out utility arboriculture aerial 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 aerial pruning

Topics:

- 1.1 Hazards, risk, controls, emergency procedures, industry guides and potential environmental damage
- 1.2 Site zoning, tree condition assessment and working at height assessment
- 1.3 Tree factors and characteristics
- 1.4 Aerial tree pruning

Topic 1.1

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

Emergency procedures relevant to the work site.

Industry guides relevant to aerial tree pruning:

- AA technical guide 1 Tree climbing and aerial rescue
- AA technical guide 2 Use of tools in a tree
- Tree work recommendations BS3998

Potential environmental damage may include:

- Damage to retained trees
- Contamination of watercourses
- Wildlife disturbance

Appropriate responses may include:

- Containment and clearance of spills
- Good housekeeping, use of spill mats
- Work sequence chosen to minimise subsequent damage to retained trees
- Wildlife assessments completed prior to work
- Other

Topic 1.2

Work site layout factors to consider may include:

- Work zone: an area where hazards may be encountered
- Drop zone: an area where it is anticipated materials may fall
- Exclusion zone: the overall operational area

Potential hazards that may be encountered may include:

- Evidence of cavities, decay or decay fungi
- Deadwood and broken branches
- Dead or flaking bark

- V shaped unions
- Cracks
- Nesting insects
- The presence of power lines or telephone wires
- Targets and obstacles underneath the tree
- Other

Working at height assessment may include:

- Avoid work at height - can the work be carried out from ground level?
- Prevent falls- the use of a mobile elevating work platform mewp to prevent a fall
- Minimise the consequence of a fall - the use of suitable equipment minimises the distance and consequence of a fall
- Planned and organised operation
- Rescue methods considered
- Competent persons
- Selection and inspection of equipment

Topic 1.3

Species, condition of tree and time of year may affect the work owing to:

Species:

- Brittle timber – loss of control
- Responses to pruning
- Other

Condition:

- Dead – loss of control, safety compromised
- Diseased – biosecurity measures
- Other

Time of year:

- Some species bleed heavily if pruned at certain times of year
- Promotion of subsequent disease or infection
- Other

Topic 1.4

Basic principles of target pruning are to:

- Simulate the trees' natural ability to shed branches
- Leaves the branch bark ridge and collar intact
- Allow complete doughnut of callus wood to form
- Allow protection boundary to develop inside collar
- Cuts carried out in accordance with industry standard and job
- Specification
- Other

Importance of accurate and appropriate cuts when removing branch material may include:

- Control
- Preventing splitting
- Preventing tearing
- Job specification BS3998 are met
- Other

Cuts that maybe used and their application:

Sink cut:

- Directional sink with back cut retaining hinge which aide's direction used on free fall and hand held sections

Step cut:

- Two over lapping cuts used on free fall and handheld sections

Inboard:

- Finishing cut towards main stem, reducing risk of saw being taken

Out board:

- Finishing cut away from main stem, timber falls flat and reduces the risk of tearing

V cut:

- two joining directional sinks with back cut, used on smaller diameter stems under tension

Holding cut:

- Sink cut with retained hinge and hold at the rear, used on larger diameter stems under tension

The points that the climber must discuss when briefing the ground staff may be:

- The contents of the electrical risk assessment including updates
- The contents of the site-specific risk assessment
- Emergency procedures
- Individual responsibilities
- Aerial rescue provision
- Second climber has climbing equipment on site
- The tree hazard evaluation.
- The planned method and sequence of work
- Means of communication established

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 may be:

- G55

Procedures for category A trees:

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

- Aerial tree works will be carried out with the line made dead and earths applied, 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
- Trees with branches in the live zone must not be climbed
- Trees with branches in the vicinity zone but not in the live zone should only be climbed 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 with the line dead
- A dedicated observer capable of stopping work will be required to ensure that the required control measures are being adhered to
- Works must be planned so that there is no possibility of a climber or tools breaching the vicinity zone

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
- These trees can be climbed and dismantled with suitable control measures
- It must be ensured that in the event of a fall or swing there is no possibility of a climber breaching the vicinity zone
- A dedicated observer capable of stopping work must be used to maintain clearances if a climber or mobile elevating work platform is above the level of conductors

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 before any aerial pruning
- If the trees are below the level of the live zone, then they may be climbed ensuring that no part of the climber's body, tools or equipment can breach the vicinity zone and that branches are not caused to breach the live zone
- A dedicated observer capable of stopping work should be used in this instance.

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
- Inspect all equipment to be used and comment on the condition/checks made.

Prepare to climb the tree:

- Insulated rods used to position ropes or to position throw bag
- Ropes or throw-bags are not thrown in proximity to overhead line
- Anchor point positioned so that climber will swing away from conductors in event of a fall
- Ropes installed into the tree on the opposite side to the overhead line

All anchor points selected taking into consideration:

- Size, strength, and structure
- Position in relation to the parts of the tree to be accessed

Establish initial anchor points considering:

- Suitability of the techniques used
- Accurate installation of equipment
- Organisation of ropes
- Safety and position of the anchor points
- Testing of the anchor points by thorough loading prior to ascent

Technique used considers:

- Efficient use of technique chosen
- Candidate is always attached to the tree in accordance with industry good practice
- Appropriate selection of anchor points
- Appropriate route taken up the tree
- Correct use of systems when changing anchor points
- Thorough load testing of new anchor points
- Risk of a fall is always managed
- Correct use of equipment

Access and climb tree to anchor points of suitable height and strength in accordance with AA technical guide TG1.

Climb the tree to work position:

- Signals agreed (hand/radio)
- Tree climbed on opposite side to conductors
- Tree climbed facing the conductors whenever reasonably practical
- Ropes routed away from the conductors
- Work position established
- Ensure climber or any equipment does not infringe the vicinity zone
- Ensure climber or any equipment cannot infringe vicinity zone in the event of a fall
- Ensure that the climber does not work directly above any conductor
- Ensure a dedicated observer capable of stopping work if the climber works above the level of the conductors

Carry out pruning work in accordance with job specification:

- Ensure clear and concise communication
- Sections cut small enough for ease of handling
- Cut sections cast away from the conductors to prevent breach of vicinity zone
- All pruning operations carried out to prevent the climber and un-insulated equipment breaching the vicinity zone
- Safe/correct pruning methods applied
- Stated clearance achieved the from the line
- Cut section controlled to prevent tearing or ripping of the bark
- Branch bark collar preserved
- If appropriate mirror the branch bark ridge
- Prune to encourage any new growth to grow away from the line

Drop zone used ensuring:

- No hanging branches left within tree
- Access equipment is not compromised/ damaged
- Infrastructure is not damaged

Descend from the tree and stow equipment safely and appropriately:

- Tree descended on opposite side to conductors
- Ropes removed ensuring no breach of vicinity zone
- Equipment stowed

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

Communication between climber and ground staff 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 on line
- **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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About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications) and Learning Assistant (an online e-portfolio).

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