

City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Use of a Chainsaw from a Mobile Elevating Work Platform (MEWP) (0038-35)

August 2022 Version 1.1

Qualification Handbook

Qualification at a glance

Industry area	Arboriculture
City & Guilds number	0038-35
Age group	18+
Entry requirements	Candidates must have achieved Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30), Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31), Level 3 Certificate of Competence in Utility Arboriculture Ground-based Pruning (0038-32) and Level 2 Award in the Safe Use of a Mobile Elevated Work-Platform (0017-01 or 0017-02) or relevant IPAF training certificate or card, Level 2 certificate of competence chainsaw maintenance and cross-cutting (0039-20), Level 2 Certificate of Competence in Felling Small Trees up-to 380mm (0039-21) or equivalent qualifications. Centres must ensure that any pre-requisites stated are met.
Assessment	To gain this qualification, candidates must successfully achieve the following assessments: • One to one practical assessment with oral questioning by an NPTC City & Guilds approved assessor
Grading	Pass only
Approvals	Full centre approval Qualification approval
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 number
City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Use of a Chainsaw from a Mobile Elevating Work Platform (MEWP)	16	18	0038-35	603/7890/6

Version and date	Change detail	Section
1.0	First version	
1.1 August 2022	Entry requirements updated City & Guilds logo updated Formatting updated Sources of general information updated	Qualification at a glance Front cover Throughout Appendix 1

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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 Use of a Chainsaw from a Mobile Elevating Work Platform (MEWP) (603/7890/6).

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 use of a chainsaw from a mobile elevated work platform (MEWP) in the utility arboriculture sector.	
What does this qualification cover?	It covers Hazards, risks, controls, emergency procedures and industry guides, using a MEWP, tree characteristics and factors to consider when pruning from a MEWP, emergency procedures, tree categorisation, electrical method of work, factors to consider when using a MEWP adjacent to power lines and using a chainsaw from a MEWP.	
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 QUALIFICAITON?		
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 Use of a Chainsaw from a Mobile Elevating Work Platform (MEWP) (0038-35) learners must be trained and assessed in the unit listed below.

Unit number	Unit title	GLH	TQT
Learners must achieve			
306	Utility arboriculture using a chainsaw from a mobile elevated work platform (MEWP)	16	18

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) there is a Fast Track method of approval. Please email qasupport@cityandquilds.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

Utility arboriculture use of a chainsaw from a Mobile Elevating Work Platform (MEWP)

Level:	3
GLH	16

What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to use of a chainsaw from a mobile elevated work platform (MEWP) in the utility arboriculture sector.

Learning outcomes

In this unit, learners will be able to

1. Carry out utility arboriculture use of a chainsaw from a mobile elevated work platform (MEWP)

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 use of a chainsaw from a mobile elevated work platform (MEWP)

Topics:

- 1.1 Hazards, risks, controls, emergency procedures and industry guides
- 1.2 Using a MEWP
- 1.3 Tree characteristics and factors to consider when pruning from a MEWP
- 1.4 Emergency procedures
- 1.5 Tree categorisation, electrical method of work, factors to consider when using a MEWP adjacent to power lines
- 1.6 Using a chainsaw from a MEWP

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 guide 5 Use of Mobile elevating work platforms (MEWP) in tree work
- Tree work recommendations BS3998

Topic 1.2

Explain the meaning of the warning decals on the MEWP.

Explain the function of all the instruments and controls of the machine.

Carry out pre-use and running checks in accordance with the operator's manual.

Site set up may include:

- Warning signs
- Traffic bollards
- Warning tape
- Barriers
- Other

Rescue from a MEWP may include:

- Trained and competent MEWP operator places work platform close to casualty/operator
- MEWP operator connects casualty/operator to suitable attachment point in the rescue MEWP
- MEWP operator assists casualty/operator into the basket
- MEWP operator disconnects casualty/operator from their original system descent made

The implications on the MEWP's safe working limit may be:

- Exceeding the rated load of the work platform
- Structural collapse
- Non–function
- Overturn of the MEWP
- Other

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

Cuts that may be used and their application:

Sink cut:

• Directional sink with back cut retaining hinge which aide's direction

Step cut:

Two over lapping cuts used on 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

Vertical:

On upright or semi-upright timber. Can be one of the above cuts

Horizontal:

• On lateral stems. Can be one of the above cuts

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

Potential defects that may be present on the overhead line when being inspected may include:

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

The requirements for earthing the MEWP may include:

- Cable avoidance tool (CAT scanner) shall be used before any earth rods are driven into the soil
- Earth rods shall be inserted to a minimum depth of 300mm in a square formation
- Earth rods shall be positioned at least 500mm from identified underground services
- Earth nest shall be positioned a minimum of eight metres from the vehicle.
- Earth rods must be driven into the ground before connecting the chassis earth cable
- The earth rods shall be applied to a designated earthing point on the vehicle

The factors affecting the use of MEWPs in proximity to overhead power lines may include:

- Use of MEWP approved by the network operator
- MEWP operator must be competent and authorised by the network operator.
- MEWPS may only be used in accordance with network operator guidance, including limitations of live and dead working and voltages
- Network operator control room shall be made aware of operator's daily whereabouts
- MEWPS should not be used in situations where parts of the machine would encroach the vicinity zone (unless appropriately earthed) or where there is imminent likelihood of electrical storm.
- Competent second person should be available on-site to conduct a rescue

The points to be considered when setting up the MEWP may include:

- No part of the MEWP shall ever breach the vicinity zone, 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
- No part of any person's body shall ever breach the vicinity zone
- No tools or equipment except approved insulated tools shall breach the vicinity zone
- No person shall work directly above or below any live conductor
- dedicated electrical observer/ lookout capable of stopping work must be used when working above the level of the electrical apparatus
- dedicated electrical observer/ lookout capable of stopping work must be used to maintain clearances
- drop zone positioned not to compromise the access equipment or infrastructure

The points to be considered for safe operation of the MEWP may include:

- No part of the MEWP shall ever breach the vicinity zone
- No part of any person's body shall ever breach the vicinity zone
- No tools or equipment except approved insulated tools shall breach the vicinity zone
- No person shall work directly above or below any live conductor
- dedicated observer capable of stopping work must be used to maintain clearances
- drop zone positioned not to compromise the access equipment or infrastructure

Topic 1.4

Emergency procedures involving a MEWP which is in contact with an overhead power line may include:

- Stop all work
- Inform the MEWP operator (if necessary)
- Inform the supervisor
- Ensuring no one touches the MEWP or attempts to use ground controls
- Move away from the immediate area of the machine
- Ensure that no one is directly beneath the conductors
- Keep all personnel at least five metres from the machine
- Contact the emergency control room to request emergency disconnection of power
- Other

Ways of dealing with an injured operator who is unable to bring themselves down may include:

- Rescue operator with second MEWP if available
- Initiate manual override ground controls as per manufactures instructions
- Other

Topic 1.5

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 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 vicinity zone but not in the live zone should only be pruned 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 electrical observer/ lookout capable of stopping work will be required to ensure that the required control measures are being adhered to

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
- A dedicated observer capable of stopping work must be used to maintain clearances if a 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
- MEWP must never be positioned directly beneath energised conductors
- If the trees are below the level of the live zone, then they may be pruned ensuring that no part of the operators' 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

Considerations when pruning trees from a MEWP adjacent to power lines may include:

- Material must be handled to prevent anything entering the vicinity zone
- No work should be attempted directly above the live zone
- There must be no likelihood of any free-falling sections bouncing into the vicinity zone
- Handheld sections must be thrown away from the conductors avoiding the vicinity zone
- Cuts must be made accurately to ensure that sections break cleanly without tearing

When dealing with vegetation which cannot be cut with a chainsaw/hand saw:

- Material must be cut using approved insulated tools
- The operator and all non-insulated equipment must remain outside the vicinity zone
- Appropriate pruning points are identified and the length of cut material is appropriate
- Dedicated observer capable of stopping work must be used to maintain clearances

Topic 1.6

Set up of the MEWP should include:

- As per manufacturers/operator's manual
- Appropriate PPE worn
- Set up position appropriate for intended operation
- Examination of ground conditions
- Deployment of stabilisers, outriggers, and jacks
- Use of extending axles where applicable
- Secure set up position
- Other

Chainsaw is checked started, and function tested ready for use in accordance with manufactures information.

Safe operation of the MEWP should include:

- All round observation
- Correct use of controls
- Control of basket
- Boom correctly slewed
- MEWP bucket elevated to suitable work position to carry out task
- Effective communication
- Other

Step cut and sink cut sections should be removed, taking the following points into account:

- Characteristics and properties of the wood allowed for
- Manageable sections selected
- Saw released from strop if applicable and attached to a supplementary anchor point
- Operator holding the saw using both the front and top/rear handles of the saw
- Side or reducing cuts used where appropriate
- Appropriate hinge left on sink cut sections
- Position of cuts on step cut sections and a complete overlap of cuts achieved
- The branch collar and/or branch bark ridge is identified when pruning
- Chain brake applied or saw switched off whilst breaking and casting sections
- Operator maintains awareness of activity below
- Ensure clear and concise communication
- Sections cut small enough for ease of handling
- Sections cast away from the conductors to prevent breach of vicinity zone
- All pruning operations carried out to prevent the mobile elevated work platform and un-insulated equipment breaching the vicinity zone
- Prune to encourage any new growth to grow away from the line
- Handheld sections are cast into a predetermined area

Lowering of the MEWP should consider:

- Platform slewed and lowered in correct sequence
- Platform lowered slowly and carefully
- Platform stowed and where applicable locked in
- Travel position
- Other

Convert the MEWP to transport position in accordance with the operator's manual

- Reference to operator's manual
- Appropriate PPE used
- Debris removed
- Stabilisers retracted and secure
- Warning lights off
- Platform checked for roadworthiness as appropriate

The reasons for inspecting the MEWP after use may be:

- Remove any operational debris from MEWP
- Identify damage that may have been caused through use
- Ensure vehicle is still roadworthy
- Other

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

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 *Centre Document Library* on www.cityandguilds.com or click on the links below:

Quality Assurance Standards: Centre Handbook

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on

- Centre quality assurance criteria and monitoring activities
- Administration and assessment systems
- Centre-facing support teams at City & Guilds / ILM
- Centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the Centre Contract.

Quality Assurance Standards: Centre Assessment

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements, or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre-assessments.

Access arrangements - When and how applications need to be made to City & Guilds provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The Centre Document Library also contains useful information on such things as:

- Conducting examinations
- Registering learners
- Appeals and malpractice

Useful contacts

Please visit the Contact Us section of the City & Guilds website, Contact us

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. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. 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 is a leader in global skills development. Our purpose is to help people, organisations and economies develop their skills for growth. We work with education providers, employers and governments in over 100 countries across the world to help people, businesses and economies grow by shaping skills systems and supporting skills development.

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City & Guilds of London Institute Giltspur House 5-6 Giltspur Street London EC1A 9DE

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