

City & Guilds Level 3 Certificate of Competence in Felling and Processing Medium Trees Over 380mm and up to 760mm (0039-33)

September 2022 Version 1.1

Qualification Handbook

Qualification at a glance

Industry area	Forestry and Arboriculture	
City & Guilds number	0039-33	
Age group	16-19, 19+	
Entry requirements	Candidates must have achieved 0039-20 Level 2 Certificate of Competence in Chainsaw Maintenance and Cross-Cutting and 0039-21 Level 2 Certificate of Competence in Felling Small Trees up to 380mm (or equivalent versions). Centres must ensure that any pre-requisites 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)	ΤQΤ	City & Guilds qualification number	Ofqual number
City & Guilds Level 3 Certificate of Competence in Felling and Processing Medium Trees Over 380mm and up to 760mm	24	28	0039-33	603/7646/6

Version and date	Change detail	Section
1.0	First version	
1.1 September 2022	Formatting changes Updated logo	Throughout Front cover
	Updated 'Sources of general information'	Appendix 1

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³ City & Guilds Level 3 Certificate of Competence in Felling and Processing Medium Trees Over 380mm and up to 760mm (0039-33)

1 Introduction

Purpose of this qualification?

The following purpose is for the City & Guilds Level 3 Certificate of Competence in Felling and Processing Medium Trees over 380mm and up to 760mm (603/7646/6).

Area	Description	
OVERVIEW		
Who is this qualification for?	Individuals who operate and carry out felling and processing medium size trees over 380mm and up to 760mm 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 this work.	
What does this qualification cover?	It covers hazards, risks, controls, emergency procedures, legislation, industry good practice, felling and processing medium size tress over 380mm up to 760mm.	
WHAT COULD THIS QUALIFIC	CATION 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 felling and processing medium size trees over 380mm up to 760mm 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 is able to safely carry out duties associated with felling and processing medium size tress over 380mm up to 760mm 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 in safely operating chainsaws, e.g., Level 3 Certificate of Competence in Felling and Processing Large Trees over 760mm.	
WHO SUPPORTS THIS QUALIFICAITON?		
Employer/Higher Education Institutions	The Arboricultural Association Confor Forestry Commission	
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 Felling and Processing Medium Trees Over 380mm and up to 760mm** learners must be trained and assessed in a minimum of one of the units listed below. The qualification will be endorsed to the context of the unit assessed:

Unit number	Unit title C	
Learners m	ust achieve	
304	Felling and processing medium trees over 380mm and up to 760mm	24

Total Qualification Time

Total Qualification Time (TQT) 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 achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT is comprised of the following two elements:

- 1) The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- 2) 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

Title and level	GLH	ΤQΤ
City & Guilds Level 3 Certificate of Competence in Felling and Processing Medium Trees Over 380mm and up to 760mm	24	28

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 NPTC Level 3 Award in Felling and Processing Trees Over 380mm (0021-01) 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) 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 16 – 19, 19+.

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/centredocument-library/policies-and-procedures/access-arrangements-reasonableadjustments

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.

Felling and Processing Medium Trees Over 380mm and up to 760mm

Level:	3
GLH	24

What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to fell and process medium trees over 380mm up to 760mm.

Learning outcomes

In this unit, learners will be able to

1. Carry out the felling and processing of medium sized trees over 380mm and up to 760mm

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 the felling and processing of medium sized trees over 380mm and up to 760mm

Topics:

- 1.1 Hazards, risks, control and emergency procedures
- 1.2 Industry guidance
- 1.3 Felling and processing medium sized trees

Topic 1.1

Hazards, risks and controls relevant to the site task and machine.

Emergency procedures relevant to the work site

Topic 1.2

Industry guides relevant to windblown trees:

- Forest Industry Safety Accord (FISA)
- Forestry Commission Technical Guide winching operations in forestry

Safe working distances:

• Two tree lengths

Felling methods may be modified by:

Double stems:

- Stems felled individually
- Assisted/mechanical felling
- Other

Hanging branches:

- Attempt made to remove the hanging branch
- No felling activities directly beneath hanging limb section
- Assisted/mechanical felling
- Other

Long limbs:

- Limb removal
- Assisted/mechanical felling
- Other

Cavities:

- Fell above or below the cavity
- Assisted/mechanical felling
- Other

Backward weighted trees:

- Wedges
- Assisted/mechanical felling
- Other

Standing stems:

- Adjusted hinge dimensions
- Assisted/mechanical felling
- Other

Topic 1.3

Pre-start checks and setting of the machine to include:

- Chain tension and condition checked for safe and effective use
- Safety features checked for condition and function
- External nuts and bolts checked for security
- Chainsaw contains sufficient fuel and chain oil for operations

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

Prepare site and escape routes by:

- Ensuring the control measures identified in site specific risk assessment are applied
- Determining the felling direction in relation to method of extraction or conversion
- Setting up a felling bench if required
- Removing debris from around the base of the trees to be felled and compact vegetation to facilitate felling at appropriate height
- Removing dead or suppressed trees and any other vegetation adjacent to the tree, in the felling direction or escape routes that may be a danger
- Inspecting the felling area including adjacent trees for dead wood and insecure branches
- Ensuring no unauthorised person is within two tree lengths

Preparing trees for felling may include:

- Brashing lower branches
- Correct break-in
- Position of the saw in relation to the operator, bar/chain not in alignment with operator's body
- Height to which branches are removed
- Saw body not above shoulder height
- Operating technique
- Brashing close to the stem
- Removing climbing vegetation
- Removing buttresses and other obstructions as appropriate
- Inspecting the tree for signs of rot or decay

Factors and precautions to consider should include:

- Capacity of the winch
- Communication method between operators
- Security of anchor points
- Compatibility of components/strength loss of equipment in certain configurations
- Serviceability and inspection of all components
- PPE required for winching operations
- Competency of operators
- Roles and responsibilities understood by all parties
- Danger zones including during off-set winching
- Safe working distances
- Other

Select and inspect work equipment:

- Check for signs of damage or fatigue to equipment
- Ensure winch, strops, chokers, winch rope, cable fittings, shackles, other ancillary equipment are compatible
- Winch overload prevention device in place
- Winch components secure
- Felling techniques should account for:
- The felling method chosen and safe working zones
- Selection and preparation of escape routes
- Assisted felling techniques used if applicable
- A sink of the appropriate dimensions
- Felling cuts made and felling aid employed using a safe and effective felling method
- A hinge being retained of adequate dimensions
- Appropriate aid tools are used safely if required to fell tree
- Escape routes being used as soon as the tree begins to fall
- Site checked for safety once tree has fallen
- Stump height left appropriate to site specification

Following hinge reduction/removal takedown methods may also include the use of:

Manual means:

- Long felling lever used to roll the tree
- Turning strap and pole used to roll the tree
- Other

Winches to assist with:

- Pulling/dragging
- Rolling/turning
- Other

Mechanical assistance:

- Forwarder/harvester
- Skidder
- Other

Take down methods may include:

- Hinge reduction roll out
- Hinge removal drag back
- Other

Danger areas in relation to hung up trees include:

- Directly under a hung-up tree
- Directly behind a hung-up tree
- Recognised danger areas involved with winching

The take down of hung-up trees using an appropriate winch should include:

- Assessing the position of tree and checking the condition of the hinge
- Removal of debris and obstacles from take down route
- Deciding on the final felling direction
- Preparing new escape routes as appropriate
- Selecting and positioning aid tools as required
- Ensuring no unauthorised persons are within two tree lengths or directly below on steep slopes
- Correct operator stance and safe position
- Appropriate position and angle of cuts using a cutting technique for the removal of an appropriate part of the hinge
- Safe withdrawal of the saw
- Leaving approximately 10% -20% of hinge to support the tree on each/either side appropriate to take down method utilised
- Supporting remnants of hinge is taken off with small angled cuts from side of tree
- Safe placement of the saw on completion of cuts

Winch is setup taking into consideration:

- Appropriate PPE used
- Position and anchorage of winch
- Danger zones and safe working distances
- Offset system used with e.g. A snatch block on steep slopes or around obstacles when appropriate
- Position of winch operator
- Position of the strop on the butt
- Attachment of winch cable to strop
- Communication with winch operator is clearly established (if applicable)

Winch is operated during which the following is taken into account:

- Winch operator remains under direct control of chainsaw operator where applicable
- Winch operator observant of tree movements
- Repositioning of the strop at the butt or repositioning of the anchor as appropriate
- Use of escape routes if applicable
- Tree is winched until in a stable condition to be processed
- Winch handle released or controlled as tree falls if applicable
- Upon completion strops are removed, checked and stowed and the winch rope rewound correctly

Removal of branches above shoulder height may include:

- Felling/removal of branch to bring it to a lower working height
- Rolling of the stem to allow for a safer working height

Equipment used to assist may include:

- Winch used to restrain timber if it could role towards operator
- Felling aid used to turn stem to aid subsequent branch removal

The implications from choice of branch severing method may include:

- The saw may become trapped
- Timber may break or split
- Timber may move suddenly or unexpectedly
- Other

Advantages of a clean stem may include:

- Reducing possible injury to the person moving the timber
- Reduce friction/collecting debris when
- Pulling timber along the ground
- Prevent damage to other trees when extracting timber
- Allowing timber to easily enter machines
- Easier stacking or loading
- Other

Branch removal techniques should account for:

- A systematic sequence of cuts and position of the saw to remove branches as appropriate for the branching habit
- Correct stance and support of the saw on tree or right leg
- Left thumb around the front handle
- Neither handle released while the chain is moving
- Appropriate use of the chainbrake
- Avoid working on lower side of unsecured tree on slopes
- Operator's not cutting towards legs or body
- Avoiding the use of the tip of guidebar
- Avoiding overreaching with chainsaw
- Not straddling the stem
- Compression and tension forces assessed and appropriate cuts used
- Using an under-sweep technique if applicable
- Winch used to restrain timber if it could roll towards the operator if applicable
- Top cut at an appropriate diameter and removed with a safe method of cutting
- The stem turned using appropriate aid tools/ techniques
- Using the stem for protection when removing remaining branches as appropriate
- All branches being removed flush with the stem

Crosscutting of timber to length should include:

- Ensuring appropriate safe working distances from both fuel and other operators is maintained
- Correct use of PPE
- Timber is in a safe and appropriate position
- Safe starting procedure adopted
- Safe stance adopted including:
- Legs and feet are clear of the chain
- Chainsaw is stable/secure/supported during crosscutting
- Minimal risk of muscular/skeletal injury
- Bar aligned to maintain accuracy
- Head out of line of chain
- Use of throttle to cut safely and efficiently
- Cutting techniques employed to complete severance of timber
- Appropriate boring technique used if applicable
- Sequence of cuts undertaken to prevent saw becoming trapped
- Reduction cuts made as appropriate in relation to diameter of timber
- Appropriate aids used for lifting, rolling or levering if applicable
- Accuracy of measurement within site specification and reasonable tolerances
- Tension and compression cuts should meet
- Chain brake used appropriately
- Saw switched off and left in safe position, bar cover replaced if appropriate

Timber should be left in a safe, stable condition and appropriate position.

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 minimised at all times.

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

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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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