



# **City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)**

December 2021 Version 1.0

**Qualification Handbook**

## Qualification at a glance

<b>Industry area</b>	Arboriculture
<b>City &amp; Guilds number</b>	0038-31
<b>Age group</b>	18+
<b>Entry requirements</b>	Candidates must have achieved Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30) or equivalent qualification. Centres must ensure that any pre-requisites stated are met.
<b>Assessment</b>	To gain this qualification, candidates must successfully achieve the following assessments: <ul style="list-style-type: none"> <li>One to one practical assessment with oral questioning by an NPTC City &amp; Guilds approved assessor</li> </ul>
<b>Grading</b>	Pass only
<b>Approvals</b>	Full centre approval Qualification approval
<b>Support materials</b>	n/a
<b>Registration and certification</b>	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 Tree Species Recognition, Growth Characteristics and Associated Hazards	8	9	0038-31	603/7886/4

Version and date	Change detail	Section
1.0	First version	

---

# Contents

<b>1</b>	<b>Introduction</b>	<b>5</b>
	Qualification structure	5
<b>2</b>	<b>Centre requirements</b>	<b>7</b>
	Approval	7
	Physical resources	7
	Any item(s) of equipment used for the assessment must comply with current legal requirements.	8
	Additional information may be sought from the relevant manufacturer's instruction book, operators' manual, product label/database or any other Government/Government Agency publication.	8
	Age restrictions	8
<b>3</b>	<b>Administration</b>	<b>9</b>
	External quality assurance	9
	Malpractice	9
	Access arrangements and special consideration	10
<b>4</b>	<b>Units</b>	<b>11</b>
<b>Unit 302</b>	<b>Utility arboriculture tree species recognition, growth characteristics and associated hazards</b>	<b>12</b>
	What is this unit about?	12
	Learning outcomes	12
	Scope of content	13
<b>Appendix 1</b>	<b>Sources of general information</b>	<b>18</b>

# 1 Introduction

## Purpose of this qualification?

The following purpose is for the **City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (603/7886/4)**.

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 tree species recognition, growth characteristics and associated hazards for utility arboriculture.
What does this qualification cover?	It covers tree species identification, growth characteristics and associated hazards.
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 for more information on the assessment.

## Qualification structure

For the **City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)** learners must be trained and assessed in the unit listed below.

Unit number	Unit title	GLH
<b>Learners must achieve</b>		
302	Utility arboriculture tree species recognition, growth characteristics and associated hazards	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 UA2.1) there is a Fast Track method of approval. Please email [qasupport@cityandguilds.com](mailto: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 302

## Utility arboriculture tree species recognition, growth characteristics and associated hazards

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 recognise tree species, growth characteristics and associated hazards within utility arboriculture sector.

### Learning outcomes

In this unit, learners will be able to

1. Understand tree species recognition, growth characteristics and associated hazards for utility arboriculture

## 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. Understand tree species recognition, growth characteristics and associated hazards for utility arboriculture**

### Topics:

- 1.1 Tree species identification
- 1.2 Growth characteristics
- 1.3 Associated hazards

#### Topic 1.1

Common species of broadleaved trees may include:

- Oak
- Ash
- Beech
- Birch
- Sycamore
- Willow
- Lime
- Hawthorn
- Blackthorn
- Cherry
- Apple
- Alder
- Horse Chestnut
- Sweet Chestnut
- Hazel
- Rowan
- Holly
- Elm
- Poplar
- Other

Common species of coniferous trees may include:

- Cypress
- pine
- Larch
- Fir
- Spruce
- Cedar
- Hemlock
- Yew
- Other

## Topic 1.2

Typically, slow growing tree species may include:

- Oak
- Beech
- Laburnum
- Box
- Yew
- Holly
- Hornbeam
- Other

Typically, fast growing tree species may include:

- Ash
- Sycamore
- Sweet Chestnut
- Willow
- Birch
- Alder
- Leyland Cypress
- Other
- 

The significance in relation to slow and fast growth rates of trees in proximity to overhead lines is:

Slow growth trees:

- Growth rates are slower per annum
- Will not require cutting so often
- Smaller clearances required

Fast growth trees:

- Growth rates are faster
- More frequent cutting is required
- Larger clearances required
- Removal of species from the proximity of the lines altogether

Factors that influence the growth rate of trees may include:

- Species
- Tree age
- Soil type
- Site conditions
- Climate factors
- Other
- 

Tree species that produce rapid sprout growth when pruned may include:

- Ash
- Sycamore
- Sweet Chestnut
- Willow
- Poplar
- Lime

- Oak
- Other

Tree species with brittle stems and branches may include:

- Horse Chestnut
- Douglas Fir
- Sycamore
- Larch
- Willow
- Birch
- Poplar
- Cedar
- Other

The significance in relation to growth in proximity to overhead lines is:

- Weight of branches from growth, wind, snow can cause them to snap easily
- They can also break off early when cutting, especially if too large a piece is removed

### **Topic 1.3**

Hazards associated with climbing plants may include:

- Vegetation obscuring electrical equipment
- Vegetation could be live
- Vegetation obscuring tree/network defects
- Vegetation causing damage to electrical equipment
- Climbing plants may be difficult to remove safely

Signs of ill-health in trees may include:

- Leaf discoloration
- Crown die back
- Peeling and dead bark
- Very thin crown
- Fungal fruiting bodies

Potential hazards and defects, and their significance in relation to overhead conductors may include:

- Fungal fruiting bodies
- Cankers
- Dead wood
- Included bark
- Very thin crown
- Peeling and dead bark
- Tight or weak forks
- Decay cavities - basal and crown
- Old pollards/topped and lopped trees
- Damaged roots and/or ground heave
- Cracks in branches
- Hanging branches
- Grey squirrel damage
- Other

Identification of decay fungi may include:

- *Ganoderma* (Artist's fungus)
- *Armillaria Mellea* (Honey fungus)
- *Inonotus hispidus* (Velvet fungus)
- *Kretzschmaria deusta* (Brittle cinder)
- *Laetiporus sulphureus* (Chicken of the woods)
- *Fomitopsis betulina* (birch polypore)
- Other

The significance of how the presence of fungi may impact the tree, work and the electrical network may include:

- Structural integrity of the tree
- Biosecurity
- Climbing safety
- Security of network

Topping and lopping trees is considered bad practice because:

- Does not conform to BS3998
- Rapid sprout growth occurs, back into the lines
- It leaves the tree unsightly
- Unstable branch unions result
- Rot can set into stem causing tree to become a hazard
- Other

The reasons for the correct sequence of cuts when undertaking pruning operations may include:

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

Different recognized pruning methods near lines and their applications include:

Through pruning:

- Low voltage overhead lines in residential areas (ABC)
- Allows conductors to pass through the canopy allowing sufficient clearance between the tree and conductor

Under/amenity pruning:

- Amenity considerations in residential areas
- Removal of some branches, but retaining the general shape of the tree

Selective Branch Removal:

- Veteran/ancient trees
- Amenity considerations
- Mature slow growing species

Side pruning:

- Woodland or forest locations
- All branches on the line side of the tree removed by a pruning cut at the trunk or back to a specified clearance



Crown reduction:

- Trees directly under the line
- Growth directed away from conductors
- Alternative to removal where tree must be retained

Fell to ground:

- Complete removal of the tree

## 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](http://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

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

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: **[feedbackandcomplaints@cityandguilds.com](mailto:feedbackandcomplaints@cityandguilds.com)**

## 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).

## Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The Standard Copying Conditions (see the City & Guilds website) also apply.

## City & Guilds

Giltspur House

5 -6 Giltspur Street

London EC1A 9DE

[www.cityandguilds.com](http://www.cityandguilds.com)