

City & Guilds CPD Module in Utility Arboriculture Basic Electrical Knowledge (0041-06)

Version 1.3 (April 2025)

CPD Module Pack

CPD Modules at a glance

Subject area	Utility Arboriculture
City & Guilds number	0041-06
Age group approved	18+
Entry requirements	<p>Centres must meet minimum age requirements.</p> <p>Candidates must hold the City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30) qualification or hold an equivalent Ofqual regulated certificate of competence for each qualification they are adding CPD for.</p> <p>Centres must ensure that any pre-requisites stated are met.</p>
Assessment	<p>To gain the CPD module, candidates must successfully achieve the following assessments:</p> <ul style="list-style-type: none"> • Practical skills test by an NPTC City & Guilds approved assessor
Grading	Pass only
Approvals	<p>Full centre approval</p> <p>Qualification approval</p>
Registration and certification	Registration and Digital Awarding of these CPD modules is through the Walled Garden and is subject to end dates.

Title	City & Guilds qualification number
City & Guilds CPD Module in Utility Arboriculture Basic Electrical Knowledge	0041-06

Version and date	Change detail
1.0 January 2022	First version
1.1 March 2022	<p>Amended typographical and formatting errors</p> <p>Moved Score Descriptors to become Section 4</p> <p>Moved Skills Test Sheets to Module content</p> <p>Added logo and space for assessment details to the Skills Test Sheets</p> <p>CPD Module Content amendments:</p> <p><i>Module 006</i></p> <p>Topics 6 and 11 – all knowledge required</p>
1.2 February 2024	<p>Amended entry requirements</p> <p>Updated CPD requirements timeframe to be consistent throughout document</p>
1.3 April 2025	<p>Changes to formatting throughout</p> <p>QHB amended to include only 0041-06</p>

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1. Introduction

Purpose of the CPD modules

Area	Description
OVERVIEW	
Who are the CPD modules for?	Individuals who are qualified utility arborists wishing to demonstrate compliance with industry and PUWER requirements for refresher training every 3-5 years.
What do the CPD modules cover?	<p>Each CPD module will cover the appropriate practical skills required to meet legislation, industry technical standards and industry good practice.</p> <p>The Utility Arboriculture CPD modules are:</p> <ul style="list-style-type: none">0041-06 Utility Arboriculture Basic Electrical Knowledge0041-07 Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards0041-08 Utility Arboriculture Ground-based Pruning0041-09 Utility Arboriculture Aerial Pruning0041-10 Utility Arboriculture Assisted Tree Felling0041-11 Utility Arboriculture Use of a Chainsaw from a Mobile Elevating Work Platform (MEWP)0041-12 Utility Arboriculture Surveyor0041-13 ETR 132 Resilience Arboricultural Surveyor
How do candidates register on CPD modules?	Assessment Centres will register candidates on the applicable CPD module. When registering candidates, the candidates email address for the Digital Credential (DC) shall be required.
How are the CPD modules delivered?	<p>These CPD modules are delivered by NPTC/ City & Guilds approved assessors.</p> <p>The skills test can be done alongside or separately at the end of training.</p>
What is issued on successful completion of a CPD module?	<p>Each candidate will complete the appropriate skills test which will be scored. Each skills test has a minimum score for the CPD module to be achieved.</p> <p>Candidates achieving the minimum score requirement will be issued a CPD Module Digital Credential (DC) to the registered email which is claimed by their NPTC Assessment Centre.</p> <p>The assessor will complete a feedback form on the candidate's performance in the skills test with any recommendations required.</p>

Assessment Guidance for the Candidate

A list of registered Assessment Centres is available from City & Guilds NPTC.
(www.nptc.org.uk)

Assessment is a process by which it is confirmed that the candidate is competent in the unit(s) within the award to which the assessment relates. It is the process of collecting evidence about the candidates' capabilities and judging whether that evidence is sufficient to attribute competence.

The Candidate must be registered through the City & Guilds approved Assessment Centre for this qualification prior to the assessment.

2. CPD module structure

For the **City & Guilds CPD Module in Utility Arboriculture Basic Electrical Knowledge (0041-06)** candidates must achieve:

Module number	Module title
006	Utility arboriculture basic electrical knowledge

CPD module pre-requisites

Title	City & Guilds number	Pre-requisites - qualification in
City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge	0038-30	Utility arboriculture basic electrical knowledge (unit 301)

3. Centre requirements

Approval

Full approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the document **Centre Approval process: Quality Standards** for further information. 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.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before delivering a course programme.

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.

Appeals and Equal opportunities

Centres must have their own auditable, appeals procedures. If a Candidate is not satisfied with the examination conditions or a Candidate feels the opportunity for examination is being denied, the Centre Manager should, in the first instance, address the problem. If, however the problem cannot be resolved, City & Guilds will arbitrate and a Principal Verifier may be approached to offer independent advice.

All appeals must be clearly documented by the Centre Manager and made available to the Principal Verifier or City & Guilds if advice is required.

Should occasions arise when Centres are not satisfied with any aspect of the verification process, they should contact the Quality Assurance Manager at City & Guilds NPTC, 5-6 Giltspur Street, London, EC1A 9DE, UK Access to the qualification is open to all, irrespective of gender, race, creed or special needs. Subject to H&S restrictions the Centre Manager should ensure that no learner is subjected to unfair discrimination on any grounds in relation to access to assessment and to the fairness of the assessment. QCA requires City & Guilds to monitor centres to check whether equal opportunities policies are being adhered to.

Quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements for verified and moderated assessments, as detailed in the Centre Assessment Standards

Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City & Guilds Quality Assurance processes visit: the **What is CASS?** and **Quality Assurance Standards** documents on the City & Guilds website.

Standards and rigorous quality assurance are maintained by the use of:

- Internal quality assurance
- City & Guilds external quality assurance.

In order to carry out the quality assurance role, Internal Quality Assurers must:

- have appropriate teaching and vocational knowledge and expertise
- have experience in quality management/internal quality assurance
- hold or be working towards an appropriate teaching/training/assessing qualification
- be familiar with the occupation and technical content covered within the qualification.

External quality assurance for the qualification will be provided by City & Guilds EQA process. EQAs are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External quality assurance is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

The role of the EQA is to:

- provide advice and support to centre staff
- ensure the quality and consistency of assessments and marking/grading within and between centres by the use of systematic sampling
- provide feedback to centres and to City & Guilds.

Learner entry requirements

Candidates must meet minimum age requirements.

Age restrictions

This qualification is approved for learners aged 16 or above.

Access arrangements and reasonable adjustments

Access arrangements are adjustments that allow candidates with disabilities, special educational needs, and temporary injuries to access the assessment and demonstrate their skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

The Equality Act 2010 requires City & Guilds to make reasonable adjustments where a disabled person would be at a substantial disadvantage in undertaking an assessment.

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** .

4. Delivering the CPD module

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs
- support and guidance they may need when working towards their qualification.
- any units they have already completed or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme, so the learner fully understands the requirements of the qualification, their responsibilities as a learner and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for this qualification:

Description	How to access
CPD Module Pack	www.nptc.org.uk

5. CPD Module skills test sheets and score descriptors

Skills Test Sheets

Skills Test Sheets are provided with each module.

Score Descriptors

Points	Descriptor
1	A poor level of knowledge, with a severe lack of any practical experience, potentially terminated on the grounds of safety. It would be recommended that the candidate carries out no further work in this skill range until further training/assessment has been completed.
2	A less than sufficient level of technical knowledge, candidate shows some practical experience in the qualification subject. It would be recommended that further training/assessment should be sought.
3	There may be identifiable gaps in knowledge, but they would be able to show some practical experience in some, but not all instances. Some standard setting maybe carried out. Candidate has met the base line pass mark and should continue as directed in the workplace.
4	A good level of technical knowledge that has been acquired from relevant practical experience and theoretical sources. Candidate should continue as directed in the workplace.
5	Excellent all round theoretical knowledge of all aspects of the topic which is supported by very extensive practical skill and experience. Candidate should continue as directed in the workplace.

6. Module 006: Utility arboriculture basic electrical knowledge

Understand basic electrical knowledge for utility arboriculture

Topic 1

Carry out a risk assessment.

- Hazards, risks and controls relevant to the site task and machine
- Emergency procedures relevant to the work site.

Topic 2

State personal protective equipment requirements:

- PPE that is required where appropriate maybe:
- High visibility clothing
- Head protection
- Eye protection
- Hand protection
- Foot protection
- Hearing protection
- Specialist equipment as specified by the network operator
- All PPE should conform to latest standards.

Topic 3

State the definition of the Vicinity Zone:

Definition of the Vicinity Zone is:

- The zone around an exposed live circuit conductor which if maintained will prevent the danger of burn or electric shock
- The Live Zone is included within the measurement of the Vicinity Zone.

Topic 4

State the Vicinity Zone distances for the following range of voltages:

The Vicinity Zone distances for the following range of voltages are:

- LV = 1m
- 11kV = 2m
- 33kV = 2.5m
- 66kV = 3m
- 132 kV = 3.5m
- 275 kV = 4m
- 400 kV = 5m.

Topic 5

State the definition of the Live Zone: Definition of the Live Zone is:

- The zone around an exposed live circuit conductor where there is danger of burn or electric shock if any part of a person's body or non-insulated tools, they are using enters the zone.

Topic 6

State the Live Zone distances for the range of voltages:

The Live Zone distances for the range of voltages are:

- LV = 0.3m
- 11kV = 0.8m
- 33kV = 0.8m
- 66kV = 1.0m
- 132kV = 1.4m
- 275kV = 2.4m
- 400kV = 3.1m.

Topic 7

State the factors to consider when carrying out ground-based operations:

Factors to consider when carrying out ground-based operations maybe:

- Do not point chipper discharge shoot towards conductors or equipment
- Do not leave long branches on site where there is a possibility of them being handled later and breaching the Vicinity Zone
- Ensure that a clear path is left under conductors to allow access for future patrols and maintenance
- Do not stack timber adjacent to substation boundary fences that may allow climbing access
- Ensure that hanging branches are not left as a hazard for others
- Other.

Topic 8

State how the Tree type and condition may change the electrical danger:

Tree type and condition may change the electrical danger because:

- Species – different sap levels e.g., willow high sap
- Spring - rising sap levels
- Full leaf/dead tree
- Trees with leaves may come into contact with the overhead line
- Other.

Topic 9

State the actions to be taken in the event of an emergency:

Actions to be taken in the event of an emergency in the workplace may include:

- Stop work
- Assess the situation
- Do not endanger yourself or other people
- Inform first aiders
- Follow emergency procedures
- Contact emergency services
- Contact the network operator/landowner
- Informing supervisor

- Other.

Topic 10

State the emergency equipment required on site:

Emergency equipment required on site may include:

- Telephone (with signal)
- First aid kit
- Fire extinguisher
- Spill kit
- Rescue equipment
- Other.

Topic 11

State the emergency action required following contact with the electrical network:

Emergency action required following contact by either machinery, trees, equipment or personnel with live overhead lines or underground cables may include:

- Keep everyone at least five meters away from the scene of the incident
- Do not become a victim by going too close or attempting a rescue
- Be aware that the high voltage auto re-closer circuit breaker may have switched power back on and there will be a voltage gradient in the ground
- Post a watchperson (if applicable)
- Do not touch any broken conductors or equipment
- Contact network operator/owner of overhead line so the line can be made dead
- Only approach a casualty after the overhead line has been proven dead and earthed by the network operator
- Contact supervisor/line manager
- Other.

Topic 12

State the action to take when rescuing a person from a low voltage line:

The action to take when rescuing a person from a low voltage line is:

- Consider pulling the persons or conductors clear using approved insulated rods – minimum of three 1.2m sections.

Topic 13

State the action to take when rescuing a person from a high voltage line:

The action to take when rescuing a person from a high voltage line is:

- No attempt should be made to rescue the person if they are in contact with a high voltage line
- The circuit may also auto-re-close and there will be a voltage gradient in the ground
- Only approach a casualty after the overhead line has been proven dead and earthed by the network operator.

Topic 14

State the information given to the network operator in an emergency:

Information that needs to be given to the network operator for the line to be made dead in case of emergency may include:

- Your name
- Explain what has happened
- Ask for the line to be made dead
- Give accurate location
- Give an accurate grid reference
- Give name and or number of overhead line
- Give pole numbers/equipment id
- Transformer/switch name/number
- Describe damage you can see
- Other.

Module 006 Utility arboriculture basic electrical knowledge

Candidate name:

Assessor name and Assessor number:

Date:

Start time:

Finish time:

Basic Electrical Knowledge	Grade 1-5
1. Carry out a risk assessment specific to the site and task	
2. State personal protective equipment requirements	
3. State the definition of the vicinity zone	
4. State the vicinity zone distances for the range of voltages	
5. State the definition of the live zone	
6. State the live zone distances for the range of voltages	
7. State the factors to consider when carrying out ground-based operations	
8. State how the tree type and condition may change the electrical danger	
9. State the actions to be taken in the event of an emergency	
10. Identify the emergency equipment required on site	
11. State the emergency action required following contact with the electrical network	
12. State the action to take when rescuing a person from a low voltage line	
13. State the action to take when rescuing a person from a high voltage line	
14. State the information given to the network operator in an emergency	
Total Score	/70
Candidate must achieve a minimum of 3 points in each element and a score of 42 to attain their digital badge	Y/N

Candidate signature	
Assessor signature	

Assessor feedback and recommendations:

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:

Centre Handbook: Quality Assurance Standards

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.

Centre Handbook: Quality Assurance Standards

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**.

City & Guilds

For over 140 years, we have worked with people, organisations and economies to help them identify and develop the skills they need to thrive. We understand the life-changing link between skills development, social mobility, prosperity and success. Everything we do is focused on developing and delivering high-quality training, qualifications, assessments and credentials that lead to jobs and meet the changing needs of industry.

We partner with our customers to deliver work-based learning programmes that build competency to support better prospects for people, organisations and wider society. We create flexible learning pathways that support lifelong employability because we believe that people deserve the opportunity to (re)train and (re)learn again and again – gaining new skills at every stage of life, regardless of where they start.

The City & Guilds community of brands includes Gen2, ILM, Intertrain, Kineo and The Oxford Group.

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