

# End-point assessment plan for professional arboriculturist integrated degree apprenticeship standard

Apprenticeship standard number	Apprenticeship standard level	Integrated end-point assessment
ST0922	6	Yes

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## Introduction and overview

This document explains the requirements for end-point assessment (EPA) for the degree-apprenticeship professional arboriculturist. End-point assessment organisations (EPAOs) must follow this when designing and delivering the EPA.

Professional arboriculturist apprentices, their employers and training provider should read this document.

A degree-apprenticeship awards a degree with the achievement of the apprenticeship. The degree learning outcomes must be aligned with the knowledge, skills and behaviours (KSBs) in the apprenticeship. The degree must be completed, passed and awarded alongside the professional arboriculturist degree-apprenticeship.

The apprentice must complete their training and meet the gateway requirements before starting their EPA. The EPA will assess occupational competence.

A degree-apprenticeship must be delivered by a Higher Education Provider (HEP) that is on the apprenticeship providers and assessment register (APAR). The selected HEP must be the training provider and the EPAO. The apprentice's employer must select a HEP from this register.

This is an integrated degree apprenticeship standard. The degree incorporates on-programme learning and assessment with an EPA to test the occupational standard's knowledge, skills, and behaviours (KSBs). The degree required for this apprenticeship standard is a BSc Arboriculture and Urban Forestry Honours degree. The BSc Arboriculture and Urban Forestry Honours degree must be worth 360 credits, with the EPA contributing the final 20 credits to complete both the Honours degree and the apprenticeship.

Full-time apprentices will typically spend 36 months on-programme (before the gateway) working towards this occupational standard. All apprentices must spend a minimum of 12 months on-programme. All apprentices must complete the required amount of off-the-job training in line with apprenticeship funding rules.

Before starting EPA, an apprentice must meet the gateway requirements. For this apprenticeship they are:

- the employer must be content that the apprentice is working at or above the occupational standard
- apprentices must have achieved all qualifications mandated in the professional arboriculturist occupational standard.

The qualifications required are:

- apprentices must have achieved English and mathematics at Level 2<sup>1</sup>
- apprentices must complete and pass all credit carrying modules of the BSc Arboriculture and Urban Forestry Honours degree, apart from the final 20 credits which will form the EPA
- the employer must have agreed the subject, title and scope for the EPA tree strategy with the EPAO

- apprentices must have compiled and submitted a portfolio of evidence to underpin the EPA professional discussion

The EPAO must confirm that all required gateway evidence has been provided and accepted as meeting the gateway requirements. The EPAO is responsible for confirming gateway eligibility. Once this has been confirmed, the EPA period starts.

This EPA should then be completed within an EPA period lasting typically for 6 months.

This EPA consists of 2 discrete assessment methods.

It will be possible to achieve the following grades in each end-point assessment method:

Assessment method 1: Tree strategy, report, and presentation with questions

- fail
- pass
- distinction

Assessment method 2: Professional discussion underpinned by a portfolio

- fail
- pass
- distinction

Performance in the end-point assessment methods will determine the overall apprenticeship standard grade of:

- fail
- pass
- distinction

## EPA summary table

<p><b>On-programme</b> (typically 36 months)</p>	<p>Training to develop the knowledge, skills and behaviours (KSBs) of the occupational standard.</p> <p>Training towards mandated qualifications, if required.</p> <p>Training towards English and mathematics Level 2, if required.</p> <p>Compiling a portfolio of evidence.</p>
<p><b>End-point assessment gateway</b></p>	<p>The employer must be content that the apprentice is working at or above the level of the occupational standard.</p> <p>Apprentices must complete and pass all credit carrying modules of the BSc Arboriculture and Urban Forestry Honours degree, apart from the final 20 credits which will form the EPA.</p> <p>Apprentices must have achieved English and mathematics at Level 2.</p> <p>For the tree strategy, report and presentation with questions, the subject, title and scope for the tree strategy must be agreed with the EPAO</p> <p>Apprentices must submit: a portfolio of evidence to underpin the professional discussion.</p>
<p><b>End-point assessment</b> (typically 6 months)</p>	<p>End-point assessment method 1: Tree strategy, report and presentation with questions, graded:</p> <ul style="list-style-type: none"> <li>• fail</li> <li>• pass</li> <li>• distinction</li> </ul> <p>End-point assessment method 2: Professional discussion underpinned by a portfolio, graded:</p> <ul style="list-style-type: none"> <li>• fail</li> <li>• pass</li> <li>• distinction</li> </ul> <p>Overall EPA/apprenticeship graded</p> <ul style="list-style-type: none"> <li>• fail</li> <li>• pass</li> <li>• distinction</li> </ul>

	These equate to 20 credits of the BSc in Arboriculture and Urban Forestry
<b>Professional recognition</b>	Aligns with recognition by: <ul style="list-style-type: none"><li>• Arboricultural Association</li><li>• Institute of Chartered Foresters</li><li>• Chartered Institute of Horticulture</li></ul>

## Length of EPA period

The EPA will be completed within an EPA period lasting typically for 6 months, starting when the EPAO has confirmed that all gateway requirements have been met.

## Order of end-point assessment methods

The assessment methods can be delivered in any order.

The result of one assessment method does not need to be known before starting the next.

## EPA gateway

The apprentice should only enter the gateway once the employer is content that the apprentice is working at or above the occupational standard. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

The EPAO determines when all gateway requirements have been met, and the EPA period will only start once the EPAO has confirmed this.

In addition to the employer's confirmation that the apprentice is working at or above the level of the occupational standard, the apprentice must have completed the following gateway requirements prior to starting EPA:

- Apprentices must complete and pass all credit carrying modules of the BSc Arboriculture and Urban Forestry Honours degree, apart from the final 20 credits which will form the EPA.
- Apprentices must have achieved English and mathematics at Level 2.  
For those with an education, health and care plan or a legacy statement, the apprenticeship's English and mathematics minimum requirement is Entry Level 3. British Sign Language (BSL) qualifications are an alternative to English qualifications for those who have BSL as their primary language.
- For the tree strategy, report and presentation with questions, the subject, title and scope for the tree strategy must be agreed with the EPAO
- For the professional discussion, the apprentice will be required to submit a portfolio of evidence

**Portfolio of evidence requirements:**

- apprentices must compile a portfolio of evidence during the on-programme period of the apprenticeship
- it must contain evidence related to the KSBs that will be assessed by the professional discussion the portfolio of evidence will typically contain 15 discrete pieces of evidence
- evidence must be mapped against the KSBs
- evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is suggested
- evidence sources may include:
  - workplace documentation/records, for example workplace policies/procedures, records
  - witness statements
  - annotated photographs
  - video clips (maximum total duration 12 minutes); the apprentice must be in view and identifiable

This is not a definitive list; other evidence sources are possible.

- it should not include reflective accounts or any methods of self-assessment
- any employer contributions should focus on direct observation of performance (for example witness statements) rather than opinions
- the evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer and apprentice confirming this
- the portfolio of evidence must be submitted to the EPAO at the gateway.

The portfolio of evidence is not directly assessed. It underpins the professional discussion and therefore should not be marked by the EPAO. EPAOs should review the portfolio of evidence in preparation for the professional discussion but are not required to provide feedback after this review of the portfolio.

## End-point assessment methods

The apprentice will be assessed against the KSBs assigned to the assessment methods outlined below, as shown in the mapping section of this EPA plan.

### End-point assessment method 1: Tree strategy, report and presentation with questions

#### Overview

A tree strategy involves the apprentice completing a significant and defined piece of work that has a real business benefit. The tree strategy, report and presentation with questions must be undertaken after the apprentice has gone through the gateway.

The tree strategy, report and presentation with questions should be designed to ensure that the apprentice's work meets the needs of the business, is relevant to their role and allows the relevant KSBs to be assessed for the EPA. The employer will ensure it has a real business application and the EPAO will ensure it meets the requirements of the EPA, including suitable coverage of the KSBs assigned to this assessment method as shown in the mapping of assessment methods. The EPAO must refer to the grading descriptors to ensure that the scope of the tree strategy, report and presentation with questions is pitched appropriately.

This assessment method includes 2 components:

- a tree strategy and report
- a presentation with questions.

The rationale for this assessment method is:

- it reflects the daily duties of this occupation which involves developing tree strategies and communicating to clients and stakeholders through written reports, and presentations
- it is a holistic assessment method, allowing the apprentice to demonstrate KSBs in an integrated way
- it provides a cost-effective assessment, as it minimises independent assessor time and makes use of the apprentice's employer's workplace, equipment and resources, and should contribute to workplace productivity

The independent assessor will assess all components of this assessment method holistically.

The independent assessor will make all grading decisions.

### Component 1 – Tree strategy and report

#### Delivery

The tree strategy and report must start after the apprentice has gone through the gateway. The typical duration of the tree strategy and report should be 4 months.

The employer should ensure the apprentice has sufficient time and the necessary resources, within this period, to plan and undertake the tree strategy and report.

The apprentice should complete their tree strategy and report unaided. When the tree strategy report is submitted, the apprentice and their employer must verify that the tree strategy and submitted report is the apprentice's own work.

The EPAO should sign off the tree strategy's title and scope to confirm its suitability at the gateway.

The tree strategy must include:

- minimum number of 50 trees
- minimum of 10 different species, two must be coniferous
- defined objectives which enables the apprentice to demonstrate the mapped KSBs, such as manipulating canopy cover, risk reduction and shaping design, or development over a period of time

The tree strategy outcome must be in the form of a report presented in an electronic format.

As a minimum, the report must include either in the main text or appendices:

- executive summary
- aims and objectives
- policy context
- site and adjacent land assessment (for example ownership, designations, soils, growing conditions, use and or occupancy)
- resources (people, funds, stakeholders)
- benefits of trees to people, wildlife and the wider environment
- the tree population (for example quantum, description, value, risk, threats, opportunities)
- management actions (for example timelines, budgets, risk management, planting plans, biosecurity, software, resources)
- performance indicators and monitoring schedules
- KSB mapping - to show how the assigned KSBs have been evidenced.

The report has a maximum word limit of 7,500. A tolerance of plus or minus 10% is allowed. Appendices, references, diagrams will not be included in this total. The report must map, in an appendix, how it evidences the relevant KSBs for both components of end-point assessment method 1.

The apprentice will conduct their tree strategy and report and submit it to the EPAO after a maximum of 16 weeks from the gateway.

The report plus materials relating to the presentation (see below) must be submitted together to the EPAO at least 4 weeks prior to the date of component 2- presentation with questions.

## Component 2 –Presentation with questions Delivery

A presentation with questions involves an apprentice presenting to an independent assessor, either face-to-face or via online video conferencing, followed by questioning from the independent assessor.

The EPAO must give the apprentice a minimum of 21 days' notice of the date of their presentation with questions.

The independent assessor must have 4 weeks to review the project report prior to the presentation with questions.

The presentation content must be completed after the gateway and submitted to the EPAO by the apprentice with their project report.

The presentation will be based on the project report and will cover:

- a summary of the project report
- explanation of how and why specific techniques and criteria have been selected
- improvements moving forward
- recommendations
- critical evaluation of the project.

The purpose of the questions will be to explore aspects of the tree strategy including:

- how it was carried out
- to clarify points as necessary
- to assess the depth and breadth of knowledge, skills and behaviours.

The apprentice needs to notify the EPAO at the submission of the tree strategy report, and presentation materials, of any technical requirements for the presentation component.

The presentation with questions will last for 60 minutes, typically including a 20 minute presentation and 40 minutes for questioning. The independent assessor has the discretion to increase the time of the presentation with questions by up to 10% to allow the apprentice to complete their last point.

The independent assessor will ask a minimum of 5 questions at the end of the presentation. Follow-up questions are allowed and do not form part of the question number count.

To deliver the presentation, the apprentice will have access to:

- presentation software
- videos
- interactive demonstrations
- notes
- computer
- work products

The presentation will be conducted as follows:

- the presentation will take place on a one-to-one basis between the independent assessor and the apprentice
- the way in which the content of the presentation is delivered is not prescriptive
- the apprentice must outline details of visual aids to be used and specify any equipment required when given notice of the presentation by the EPAO.

The independent assessor will assess the tree strategy, report and presentation with questions method holistically.

KSBs met and answers to questions, must be recorded by the independent assessor.

The independent assessor will make all grading decisions.

## Assessment location

The presentation with questions should take place in:

- a suitable location in a controlled environment agreed by the EPAO.

Video conferencing can be used to conduct the presentation, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

## Question and resource development

EPAOs will create and set open questions to assess KSBs mapped to this assessment method. Each EPAO must develop a question bank of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure the questions they contain are fit for purpose. Independent assessors must use the question bank as a source for questioning and are expected to use their professional judgment to tailor those questions appropriately. Independent assessors are responsible for generating suitable follow-up questions in line with the EPAO's training and standardisation process. The questions relating to underpinning KSBs must be varied yet allow assessment of the relevant KSBs.

EPAOs will produce specifications to outline in detail how the practical assessment will operate, what it will cover and what should be assessed. It is recommended that this be done in consultation with employers. EPAOs should put in place measures and procedures to maintain the security and confidentiality of their specifications if employers are consulted. Specifications must be standardised by the EPAO.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

EPAOs will produce the following material to support this assessment method:

- independent assessor training materials
- assessment specifications
- grading guidance
- a question bank
- assessment recording documentation

- guidance document for employers and apprentices on the process / timescales for the assessment as well as a description of the purpose
- guidance document for independent assessors on how to carry out the assessment
- assessment specifications.

## End-point assessment method 2: Professional discussion underpinned by a portfolio

### Overview

This assessment method has one component.

A professional discussion is a two-way discussion which involves both the independent assessor and the apprentice actively listening and participating in a formal conversation. It gives the apprentice the opportunity to make detailed and proactive contributions to confirm their competency across the KSBs mapped to this method.

The rationale for this assessment method is:

- it allows the apprentice to be assessed against knowledge, skills and behaviours which may not naturally occur during the other assessment methods
- it enables the apprentice to evidence their application of skills and behaviours as well as knowledge
- it allows scope for the apprentice to demonstrate the depth and breadth of KSBs, enabling the opportunity to achieve a distinction grade

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### Delivery

This assessment will take the form of a professional discussion which must be appropriately structured to draw out the best of the apprentice's competence and cover the KSBs assigned to this assessment method. It will involve questions that will focus on the following themes:

- professional advice
- expert witness responsibilities
- planning and construction
- interaction with the built environment
- inspecting trees
- procurement
- specifying tree works
- managing tree populations
- strategy
- woodland management
- community engagement
- finance and funding
- managing people, relationships and own performance
- project management
- promoting products and services
- operational systems

The independent assessors will conduct and assess the professional discussion.

The professional discussion must last for 120 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer.

The professional discussion underpinned by a portfolio must be split into 2 sections held on the same working day to allow for comfort breaks.

A midpoint comfort break of 15 mins should be given which is exclusive of the total assessment time. EPAOs must manage invigilation of apprentices during breaks to maintain security of the assessment in line with their malpractice policy.

During this method, the independent assessor must use the EPAO's question bank as a source for questioning and are expected to use their professional judgment to tailor those questions appropriately. Independent assessors may ask further questions for clarification purposes and to allow the apprentice the opportunity to cover the KSBs mapped to this assessment method.

The professional discussion will be conducted as follows:

The professional discussion will be undertaken by an independent assessor.

The method is underpinned by the portfolio submitted as a gateway requirement.

Questioning should be used to assess KSBs mapped to this method and to explore the apprentice's ability to demonstrate against the KSBs in different circumstances.

A minimum of 17 questions must be asked.

KSBs should only be assessed once. Apprentices will be expected to refer to examples in their portfolio to support their answers.

The apprentice and the independent assessor will have access to their own copies of the portfolio throughout the professional discussion and both can refer to it as needed, however the portfolio itself is not assessed.

Independent assessors must be developed and trained in the conduct of professional discussions, how to design their own questions from reviewing portfolio content, and in reaching consistent judgement by their EPAO.

The purpose of the professional discussion underpinned by portfolio is to:

- assess the KSBs mapped to this method
- explore aspects of the work, including how it was carried out, in more detail
- enable the apprentice to draw on their experience to evidence the KSBs

KSBs met and answers to questions, must be recorded by the independent assessor.

The independent assessor will make all grading decisions.

### **Assessment location**

The professional discussion should take place in a quiet room, free from distractions and influence.

The professional discussion can take place in any of the following:

- employer's premises
- a suitable venue selected by the EPAO (for example a training provider's premises)
- via video conferencing

Video conferencing can be used to conduct the professional discussion, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

## Question and resource development

Independent assessors are responsible for generating suitable questions in line with the EPAO's training and standardisation process. A question bank must be developed by EPAOs. Independent assessors must use the question bank as a source for questioning and are expected to use their professional judgment to tailor those questions appropriately. The question bank must be of sufficient size to prevent predictability and the EPAO must review it regularly (at least once a year) to ensure that it, and its content, are fit for purpose. The questions relating to the underpinning KSBs, must be varied yet allow assessment of the relevant KSBs.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

EPAOs will produce the following material to support this assessment method:

- a question bank
- structured specification
- Independent assessor assessment materials which include:
  - training materials
  - administration materials
  - moderation and standardisation materials
  - guidance materials
  - grading guidance

## Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments to the assessment methods for the EPA for this apprenticeship standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this EPA plan.

## Overall EPA grading

All assessment methods are weighted equally in their contribution to the overall EPA grade.

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

Independent assessors must individually grade each assessment method, according to the requirements set out in this plan.

EPAOs must combine the individual assessment method grades to determine the overall EPA grade.

Apprentices who fail one or more assessment method will be awarded an overall EPA 'fail'.

In order to gain an overall EPA 'pass', apprentices must achieve a pass or distinction in all the assessment methods.

In order to achieve an overall EPA 'distinction', apprentices must achieve a distinction in both assessment methods.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method: project and report with presentation	Assessment method: professional discussion (supported by portfolio)	Overall grading
Fail	Any grade	Fail
Any grade	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Pass
Distinction	Pass	Pass
Distinction	Distinction	Distinction

Any grade = fail, pass or distinction

## Re-sits and re-takes

Apprentices who fail one or more assessment method/s will be offered the opportunity to take a re-sit or a re-take at the employer's discretion. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for a re-sit or a re-take.

Apprentices may not need to complete a different tree strategy and or report where a re-sit/re-take is required but may need to either re-work their tree strategy report and/or presentation.

Apprentices must be asked different questions in the case of a re-sit or re-take.

The timescales for a re-sit/re-take are agreed between the employer and EPAO. A re-sit is typically taken within 2 months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 4 months of the EPA outcome notification.

All assessment methods must be taken within a 6-month period, otherwise the entire EPA will need to be re-sat/re-taken.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to a higher grade.

Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

## Roles and responsibilities

Role	Responsibility
Apprentice	<p>As a minimum, apprentices should:</p> <ul style="list-style-type: none"> <li>• participate in and complete on-programme training to meet the KSBs as outlined in the occupational standard for a minimum of 12 months</li> <li>• Apprentices must complete and pass all credit carrying modules of the BSc Arboriculture and Urban Forestry Honours degree, apart from the final 20 credits which will form the EPA.</li> <li>• undertake the required amount of off-the-job training in line with apprenticeship funding rules</li> <li>• understand the purpose and importance of EPA</li> <li>• undertake the EPA including meeting all gateway requirements</li> </ul>
Employer	<p>As a minimum, employers should:</p> <ul style="list-style-type: none"> <li>• select the EPAO and training provider</li> <li>• work with the training provider (where applicable) to support the apprentice in the workplace and to provide the opportunities for the apprentice to develop the KSBs</li> <li>• arrange and support a minimum the required amount of off-the-job training in line with apprenticeship funding rules</li> <li>• decide when the apprentice is working at or above the occupational standard and so is ready for EPA</li> <li>• ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan</li> <li>• remain independent from the delivery of the EPA</li> <li>• confirm arrangements with the EPAO for the EPA (who, when, where) in a timely manner (including providing access to any employer-specific documentation as required, for example company policies)</li> <li>• ensure that the EPA is scheduled with the EPAO for a date and time which allow appropriate opportunity for the KSBs to be met</li> <li>• ensure the apprentice is well prepared for the EPA</li> <li>• ensure the apprentice is given sufficient time away from regular duties to prepare for and complete all post-gateway elements of the EPA, and that any required</li> </ul>

	<p>supervision during this time (as stated within this EPA plan) is in place</p> <ul style="list-style-type: none"> <li>• where the apprentice is assessed in the workplace, ensure that the apprentice has access to the resources used on a daily basis</li> <li>• pass the certificate to the apprentice</li> </ul>
EPAO	<p>As a minimum, EPAOs should:</p> <ul style="list-style-type: none"> <li>• conform to the requirements of this EPA plan and deliver its requirements in a timely manner</li> <li>• conform to the requirements of the apprenticeship provider and assessment register</li> <li>• conform to the requirements of the external quality assurance provider (EQAP) for this apprenticeship standard</li> <li>• understand the occupational standard</li> <li>• make all necessary contractual arrangements, including agreeing the price of the EPA</li> <li>• develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material)</li> <li>• appoint suitably qualified and competent independent assessors</li> <li>• appoint administrators (and invigilators where required) to administer the EPA as appropriate</li> <li>• provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading</li> <li>• provide adequate information, advice and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA</li> <li>• arrange for the EPA to take place, in consultation with the employer</li> <li>• where the apprentice is not assessed in the workplace, ensure that the apprentice has access to the required resources and liaise with the employer to agree this if necessary</li> <li>• develop and provide appropriate assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders</li> <li>• have no direct connection with the apprentice, their employer or training provider. In all instances, including</li> </ul>

	<p>when the EPAO is the training provider (i.e. HEI), there must be no conflict of interest</p> <ul style="list-style-type: none"> <li>• have policies and procedures for internal quality assurance (IQA), and maintain records of regular and robust IQA activity and moderation for external quality assurance (EQA) purposes</li> <li>• deliver induction training for independent assessors, and for invigilators and/or markers (where used)</li> <li>• undertake standardisation activity on this apprenticeship standard for all independent assessors before they conduct an EPA for the first time, if the EPA is updated and periodically as appropriate (a minimum of annually)</li> <li>• manage invigilation of apprentices in order to maintain security of the assessment in line with the EPAO's malpractice policy</li> <li>• verify the identity of the apprentice being assessed</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> <li>• provide details of the independent assessor's name and contact details to the employer</li> <li>• have and apply appropriately an EPA appeals process</li> <li>• request certification via the Apprenticeship Service upon successful achievement of the EPA</li> </ul>
Independent assessor	<p>As a minimum, independent assessors should:</p> <ul style="list-style-type: none"> <li>• be independent of the apprentice, their employer and on-programme delivery i.e. there must be no conflict of interest. Independent assessors should be sourced from another University, industry or a professional body; or if none of the above options are available the independent assessor can be from the same University but must be independent of the apprentice's on programme learning and assessment</li> <li>• understand the occupational standard and the requirements of this EPA</li> <li>• have, maintain and be able to evidence up-to-date knowledge and expertise of the subject matter</li> <li>• deliver the end-point assessment in-line with the EPA plan</li> <li>• comply with the IQA requirements of the EPAO</li> <li>• have no direct connection or conflict of interest with the apprentice, their employer or training provider; in all instances, including when the EPAO is the training provider (i.e. HEI)</li> </ul>

	<ul style="list-style-type: none"> <li>• attend induction training</li> <li>• attend standardisation events when they begin working for the EPAO, before they conduct an EPA for the first time and a minimum of annually on this apprenticeship standard</li> <li>• assess each assessment method, as determined by the EPA plan, and without extending the EPA unnecessarily</li> <li>• assess against the KSBs assigned to each assessment method, as shown in the mapping of assessment methods and as determined by the EPAO, and without extending the EPA unnecessarily</li> <li>• make all grading decisions</li> <li>• record and report all assessment outcome decisions, for each apprentice, following instructions and using assessment recording documentation provided by the EPAO, in a timely manner</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> <li>• mark open (constructed) test answers accurately according to the EPAO's mark scheme and procedures</li> </ul>
Training provider	<p>As a minimum, training providers should:</p> <ul style="list-style-type: none"> <li>• work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the knowledge, skills and behaviours as listed in the occupational standard</li> <li>• conduct training covering any knowledge, skill or behaviour requirement agreed as part of the Commitment Statement (often known as the Individual Learning Plan).</li> <li>• monitor the apprentice's progress during any training provider led on-programme learning</li> <li>• advise the employer, upon request, on the apprentice's readiness for EPA</li> <li>• remain independent from delivery of the EPA. Where the training provider is the EPA (i.e. a HEI) there must be procedures in place to mitigate against any conflict of interest</li> </ul>

## Internal Quality Assurance (IQA)

Internal quality assurance refers to the strategies, policies and procedures that EPAOs must have in place to ensure valid, consistent and reliable end-point assessment decisions. EPAOs for this EPA must adhere to all requirements within the Roles and Responsibilities section and:

- have effective and rigorous quality assurance systems and procedures that ensure fair, reliable and consistent assessment across employers, places, times and independent assessors
- appoint independent assessors who are competent to deliver the end-point assessment and who meet all the following minimum requirements:
  - hold a level 6 arboricultural qualification
  - have 3 years arboricultural experience following qualification at level 6
  - undertake relevant CPD in the previous year
- operate induction training for independent assessors, markers and invigilators
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- where appropriate:
  - provide ongoing training for markers
  - provide ongoing training for invigilators
- undertake standardisation activity on this apprenticeship standard for all independent assessors:
  - before they conduct an EPA for the first time
  - if the EPA is updated
  - periodically as appropriate (a minimum of annually)
- conduct effective moderation of assessment decisions and grades
- conduct appeals where required, according to the EPAO's appeals procedure, reviewing and making final decisions on assessment decisions and grades

## Value for money

Affordability of the EPA will be aided by using at least some of the following practices:

- Use of technology – for example video conferencing where applicable
- Location – for example use of employer premises
- Making maximum use of each typical 7.5 hour working day
- Observation of naturally occurring evidence in the workplace

## Professional body recognition

This apprenticeship standard is designed to prepare successful apprentices to meet the requirements for registration as a Professional Member with the Arboricultural Association, a Chartered Arboriculturist with the Institute of Chartered Foresters, and a Member with the Chartered Institute of Horticulture.

The experience gained and responsibility held by the apprentice on completion of the apprenticeship standard will either wholly or partially satisfy the requirements for registration with the professional body. For more details on the requirements and application process, please contact the professional body directly.

# Mapping of knowledge, skills and behaviours (KSBs)

## End-point assessment method 1: Tree strategy, report and presentation with questions

### Knowledge

K3	Factors for planting and establishing trees to independence in the landscape for example designations, soil type, landscape type, biosecurity, tree population resilience, ecosystem services and local ecology, safety standards and regulations, (for example British Standards 8545 as updated) and best practice guidance (for example from the Arboricultural Association, the Institute of Chartered Foresters, National Tree Safety Group, Forest Research)
K6	Purpose and components of proactive tree strategy incorporating risk assessment methodologies and emergency planning for extreme weather events.
K7	Tree classification, nomenclature (for natural and cultivated plants), species requirements, vulnerabilities and characteristics.
K8	Benefits of trees for people, air quality, nature, the environment, ecosystem services and natural capital. The concept of green infrastructure design within planning and the role of trees in planning policy.
K11	Tree valuation methodologies, their benefits, weaknesses and use for different purposes.
K13	Functions and value of tree management systems and software. For example: GIS, CAD, MS Products, Building Information Modelling (BIM)
K16	Communication techniques (for example written, listening, oral) and tools (for example social media, presentation software).
K19	Soil science and interaction between trees, biotic factors and soil type.
K27	Principles of managing tree pests and diseases.
K30	Techniques for creating and interpreting maps and plans.
K31	Research, data collection and analysis techniques, including reliable sources of arboricultural information.

### Skills

S2	Collect and evaluate arboricultural information and research papers including the identification and analysis of data trends.
S3	Identify trees and their site requirements.
S4	Create and interpret maps and plans.

S5	Communicate technical and non-technical information using various methods and formats. Including verbal, written and electronic (methods) and graphs, tables, images and maps (formats).
S6	Use GIS and CAD software.
S12	Create a tree strategy to include application of tree risk management principles to inform decision making.
S13	Apply tree valuation methods to inform decision making.
S14	Specify tree planting and aftercare requirements. Including species selection, technical planting guidance and planting plans.
S15	Identify existing and potential threats of tree pests and diseases; and plan management actions to prevent, treat and mitigate their impact on people, trees and habitats including any relevant legislation.
S23	Assess and evaluate soil in relation to tree establishment, growth and health.

### Behaviours

B2	Communicate respectfully with clients, stakeholders and colleagues and take into account diversity, inclusivity and equality.
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## End-point assessment method 2: Professional discussion underpinned by a portfolio

### Knowledge

K1	Techniques for undertaking tree works to industry safety standards, including British Standard 3998 (as updated), relevant to the site and operation including complex, valued and unusual trees.
K2	Principles and regulation for managing trees in the context of design, planning and construction including British Standard 5837 (as updated), for the relevant site and operation including complex, valued and unusual trees.
K4	Tree inspection and assessment methodologies and equipment including up to date available technology.
K5	Legislation, regulation and best practice guidance (for example from the Arboricultural Association, the Institute of Chartered Foresters, National Tree Safety Group, Forest Research) in relation to trees and their management.
K9	Woodland management principles and techniques for supporting amenity and biodiversity.
K10	The role of policy and strategy in local, organisational and national governance.

K12	Sources of funding and income for arboricultural activities (including grant funding) and techniques for writing businesses cases and grant applications.
K14	Legislation, regulation and guidance in relation to Health and Safety for people, machinery, tools and equipment (for example Working at Height, LOLER, PUWER, AFAG, COSHH) to include principles of workplace risk assessment and management, and the production of method statements.
K15	Methods for community and stakeholder engagement, their value and techniques for evaluating results.
K17	The arboricultural profession and how other professions are, or could be, aligned with arboriculture.
K18	Requirements of tendering and procurement processes. For example, rules of financial limits, legal challenge, managing contractors and or clients, and forms of contracts.
K20	Interaction of trees with the built environment including direct or indirect damage to infrastructure, SuDS (Sustainable drainage systems), rooting volumes, utilities and subsidence.
K21	Responsibilities and requirements of acting as an expert witness including understanding the role of the expert witness in legal proceedings. For example, their duty to the court and being aware of CPR (Civil procedure rules) Part 35.
K22	Properties of ancient trees, veteran trees and trees of historical or cultural significance and the implications for tree management and planning decisions.
K23	Principles of managing organisational systems and processes.
K24	Principles of managing people.
K25	Principles of relationship management and techniques for managing own performance.
K26	Principles of providing sales and marketing services to clients.
K28	Principles of tree population management including survey and inspection regimes.
K29	Principles of managing finances and budgets.
K32	Principles of project management.
K33	Tree structure, physiological and metabolic processes and implications for management.

## Skills

S1	Provide professional advice including on legal frameworks and environmental legislation.
S7	Create business cases.
S8	Interpret policy, legislation, regulation and organisational best practice.
S9	Procure arboricultural services through a contract awarding or a tendering process.
S10	Inspect trees in relation to abiotic and biotic tree health, structure, physiological condition and suitability for location.
S11	Specify tree works to achieve defined objectives and which promote long-term tree health, quality standards, biosecurity measures, tree risk management and nuisance management.
S16	Choose the appropriate tree health and stability measuring and or monitoring technology (for example structural stability assessment equipment, biological activity monitors).
S17	Manage own performance, identifying improvements and training requirements. Seek clarification, when necessary, know limits of expertise and when specialist input is required.
S18	Engage stakeholders impacted by changes to trees and manages their expectations.
S19	Manage tree survey and inspection regimes for the strategic management of trees.
S20	Find solutions in challenging and complex situations.
S21	Lead and manage projects with multiple stakeholders.
S22	Promote the organisation, products or services.
S24	Manage employees, contractors or volunteers including compliance with employment legislation, health and safety, inclusion, performance, quality, training, recruitment, development and evaluation of processes to improve the efficiency and productivity of others.
S25	Manage organisational systems. For example recording, monitoring or reporting systems.
S26	Set, monitor and manage budgets.
S27	Manage professional relationships and interactions with others including negotiation, collaboration, advocacy, chairing and participating in meetings.
S28	Advise on the management of trees in the context of design, planning and construction.
S29	Advise on the management of trees in relation to the built environment.
S30	Assess the type, purpose, benefits, condition and quality of woodland.

## Behaviours

B1	Act with integrity, for example being open and transparent in dealing with clients and stakeholders, including confidentiality.
B3	Act in a professional manner including taking responsibility for own actions and being respectful of others.
B4	Adopt and promote a safety culture within the organisation and act with regard to health, safety and wellbeing for self and others.
B5	Embed sustainable working practices aligned with carbon reduction targets and other environmental policies.

## Grading Descriptors

### End-point assessment method 1: Tree strategy, report and presentation with questions

KSBs	Pass	Distinction
K6 S12	<p><b>Tree Strategies</b></p> <p>Creates a tree strategy that identifies, quantifies and judges tree risk using tree risk management principles and emergency planning for extreme weather events. (K6, S12)</p>	<p><b>Tree Strategies</b></p> <p>Critically evaluates the implications of management decisions on tree risk and benefits within the tree strategy. (K6, S12)</p>
K8 K11 S13	<p><b>Benefits of trees</b></p> <p>Evaluates the benefits of trees for people, air quality, nature, the environment, ecosystem services and natural capital and implications for management including responding to climate change.</p> <p>Articulates the value of trees as part of green infrastructure and their value for wider landscape management.</p> <p>Evaluate tree valuation methodologies, their benefits, weakness and use including for individual trees and urban tree populations. (K8, K11, S13)</p>	<p><b>Benefits of trees</b></p> <p>Critically evaluates how management actions enhance the benefits and value of tree populations. (K8, K11, S13)</p>
K16 S5 B2	<p><b>Communication</b></p> <p>Communicates technical and non-technical information respectfully with clients, stakeholders and colleagues, using a range of methods (verbal, written and electronic) and formats (graphs, tables, images and maps) which take into account the needs of the audience, diversity, inclusivity and equality. (K16, S5, B2)</p>	
K30 S4	<p><b>Maps and plans</b></p> <p>Gathers and evaluates information about sites from maps and plans and draws conclusions about implications for trees. Creates a map and plan for an area to communicate information about the trees. (K30, S4).</p>	

K7 S3	<b>Tree identification</b> Identifies trees using scientific and common names in line with the International Code for Nomenclature (to include common cultivars), assessing their suitability for the site, including purpose, benefits, disease susceptibility, space and requirements for growth. (K7, S3)	
K27 S15	<b>Pests and Diseases</b> Identifies existing and potential tree pest and disease threats and their implications for people, plants and the environment and any legislative requirements, setting out plans for control and prevention. (K27, S15)	<b>Pests and Diseases</b> Evaluates alternative management actions in response to pest and disease threats, considering cost; effectiveness; risk to people; and environmental impact. (K27, S15)
K3 S14	<b>Planting specification</b> Produces a planting and aftercare specification that includes species selection, technical planting guide and planting plan to meet policy requirements, designations, soil type, landscape type, biosecurity, tree population resilience, ecosystem services, local ecology. (K3, S14)	<b>Planting specification</b> Critically evaluates their recommendations with reference to designations, soil type, landscape type, biosecurity, tree population resilience, ecosystem services and local ecology. (K3, S14)
K19 S23	<b>Soil</b> Assesses soil properties and health, and the implications of these for tree health, growth and management. (K19, S23)	<b>Soil</b> Critically analyses management options considering soil chemistry, biology, structure and the interaction between these and the trees. (K19, S23)
K31 S2	<b>Research</b> Analyses tree population data and identifies trends to inform management decisions, supported by evidence from published research findings. (K31, S2)	<b>Research</b> Critically evaluates published research relating to trees and draws conclusions about implications for tree management. Critically analyses data about tree population to model impacts of management decisions over time. (K31, S2)
K13 S6	<b>Technology</b> Uses and appraises tree management systems and software, suitability for purpose and alternatives. Analyses data from tree management software systems. (K13, S6)	

## End-point assessment method 2: Professional discussion underpinned by a portfolio

KSBs	Pass	Distinction
K5 S1	<p><b>Professional advice</b></p> <p>Provides advice on environmental legislation and frameworks in relation to trees, including tree protection, duty of care, nuisances, risks, costs, resources, and potential assumptions. (K5, S1)</p>	
K21	<p><b>Expert witness</b></p> <p>Articulates the responsibilities and requirements of acting as an expert witness including their understanding of the role of the expert witness in legal proceedings. (K21)</p>	
K2 S28	<p><b>Planning and construction</b></p> <p>Advises on how to manage trees within the context of design, planning and construction to include managing trees on construction sites to the British Standard 5837. (K2, S28)</p>	
K20 S29	<p><b>Interaction with built environment</b></p> <p>Justifies advice they have provided on the management and interaction of trees in relation to the built environment including prevention and mitigation of damage. (K20, S29)</p>	<p><b>Interaction with built environment</b></p> <p>Evaluates alternative proposals for prevention and mitigation of damage to the built environment considering different factors for example cost, effectiveness, suitability to situation. (K20, S29)</p>
K4 K22 K33 S10 S16	<p><b>Inspect trees</b></p> <p>Justifies their choices of tree inspection and assessment methodologies and recommends detection equipment and technology in different scenarios.</p> <p>Articulates how they surveyed and inspected trees in complex and unusual circumstances (for example, ancient or veteran trees, those that are rare, those that are of historical or cultural importance or those involved in subsidence), assessing tree health with respect to the structural, physiological and metabolic processes (including biotic and abiotic disorders) and evaluates the implications for tree management and planning decisions. (K4, K22, K33, S10, S16)</p>	<p><b>Inspect trees</b></p> <p>Critically evaluates the benefits of using different advanced detection techniques and biological activity tools in different scenarios with reference to their experience of them. (K4, S10, S16)</p>

K18 S9 B3	<p><b>Procurement</b></p> <p>Justifies their approach to procuring arboricultural services through a contract awarding or tendering process, demonstrating an understanding of financial and legal requirements and taking responsibility for their actions to ensure positive outcomes in a professional and respectful manner.</p> <p>(K18, S09, B3)</p>	
K1 S11 B5	<p><b>Specify tree works</b></p> <p>Articulates how to specify tree works in line with BS3998 considering a range of criteria, including:</p> <ul style="list-style-type: none"> <li>• long term tree health,</li> <li>• quality standards,</li> <li>• biosecurity measures,</li> <li>• tree risk management,</li> <li>• nuisance management</li> <li>• environmental sustainability including carbon reduction targets and budgets</li> </ul> <p>(K1, S11, B5)</p>	
K28 S19	<p><b>Manage tree populations</b></p> <p>Evaluates their approach to the management of tree surveys and inspections and the principles and considerations they apply to their implementation. (K28, S19)</p>	<p><b>Manage tree populations</b></p> <p>Critically analyses how they manage tree survey and inspection regimes and suggests where cost or time efficiencies to support the business could be made. (K28, S19)</p>
K10 K17 S8	<p><b>Strategy</b></p> <p>Articulates the implications and impacts of Government policy (including national planning and environmental policy), industry guidance and cultural trends in the context of trees.</p> <p>Evaluates their professional arboricultural role and articulates how other related professions could align.</p> <p>(K10, K17, S8)</p>	<p><b>Strategy</b></p> <p>Evaluates the role of the arboriculturist in interpreting Government policy and strategy at a local level and their interactions with other related professionals (for example planning officers). (K10, K17, S8)</p>
K9	<p><b>Woodland management</b></p>	<p><b>Woodland management</b></p>

S30	Justifies the different techniques they have recommended for woodland management following their assessment of the type, purpose, condition and quality of woodland. (K9, S30)	Critically evaluates woodland management techniques for different scenarios and outcomes. (K9)
K15 S18	<b>Community engagement</b> Justifies their selection and implementation of stakeholder engagement methods, their evaluation of the results and how they managed stakeholder expectations. (K15, S18)	<b>Community engagement</b> Critically evaluates different methods of stakeholder engagement and articulates how they manage engagement with stakeholders who strongly disagree with proposals. (K15, S18)
K12 K29 S7 S26	<b>Finance &amp; funding</b> Articulates how to source funding and income for arboricultural activities including how to write applications for grant schemes. Creates business cases and articulates how they set, monitor and manage budgets to achieve the required outcome. (K12, K29, S7, S26)	
K14 K24 S24 B4	<b>Manage People</b> Explains their approach to managing staff, contractors or volunteers and justifies how this benefits people and the organisation, including how they: <ul style="list-style-type: none"> <li>• promote a safety culture and comply with health and safety legislation including risk assessment and method statements</li> <li>• comply with employment legislation</li> <li>• manage performance and training</li> <li>• support inclusion</li> <li>• develop and evaluate processes to improve quality, efficiency and productivity.</li> </ul> (K14, K24, S24, B4)	
K25 S17 S27 B1	<b>Manage relationships and own performance.</b> Manages their professional relationships and interactions with others, including negotiation, advocacy, collaboration and the chairing and participation in meetings.	

	<p>Acting with integrity and respecting confidentiality.</p> <p>Analyses their own performance to identify their efficiencies, improvements, limits of expertise, and additional learning and or training requirements. (K25, S17, S27, B1)</p>	
K32 S20 S21	<p><b>Project management</b></p> <p>Leads and manages projects with multiple stakeholders from inception to evaluation using appropriate tools and techniques, finding solutions to challenging or complex situations.</p> <p>(K32, S20, S21)</p>	<p><b>Project management</b></p> <p>Critically evaluates their own project management performance and the solutions they created to solve complex situations. (S20)</p>
K26 S22	<p><b>Promotion</b></p> <p>Critically evaluates how they promote their organisation, products or services to customers or stakeholders in line with organisational objectives.</p> <p>(K26, S22)</p>	
K23 S25	<p><b>Organisational systems</b></p> <p>Appraises how their management of organisational systems and processes supports operational requirements (for example compliance, efficiency). (K23, S25)</p>	<p><b>Organisational Systems</b></p> <p>Critically evaluate systems and processes suggesting improvements to support business objectives. (K23, S25)</p>