

End-point assessment plan for: Crop Technician (core & options) apprenticeship standard

Standard reference number	Level of this EPA plan	Integrated
ST0018	3	No

Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Crop Technician (core & options) apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Crop Technician (core & options) apprentices, their employers and training providers.

Full time apprentices will typically spend 24 months on-programme working towards the occupational standard, with a minimum of 20% off-the-job training.

The EPA should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

As a gateway requirement and prior to taking the EPA, apprentices must complete all approved qualifications mandated in the standard:

Level 2 Awards in:

- Emergency First Aid at Work
- Safe use of Pesticides
- Additional safe use of Pesticides in Boom Sprayer, Mounted, trailer or Self-propelled equipment OR Granular applicator equipment OR Handheld applicator equipment

All pre-requisites for EPA assessment methods must also be complete and available for the assessor as necessary.

Apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA.

The EPA must be completed within six month(s), after the apprentice has met the EPA gateway requirements.

Performance in the EPA will determine the apprenticeship grade. The EPA consists of three distinct assessment methods, which will be graded independently and then combined for the final grade. The grading for each element of the assessment (online, practical demonstration and professional discussion) will be a Pass, Merit or Distinction (see individual sections for relevant criteria) and each element holds equal weighting.

Overall for the apprentice to achieve a:

- Pass: the apprentice must achieve a minimum of three passes
- Merit: the apprentice must achieve a minimum of two merits and one pass
- Distinction: the apprentice must achieve a minimum of two distinctions and one merit

On-programme (typically 24 months)	End Point Assessment Gateway	End Point Assessment (not more than 26 weeks)	Professional recognition
Training to develop the occupation standard's knowledge, skills and behaviours.	<ul style="list-style-type: none"> • English/mathematics at Level 2 achieved • Emergency first aid at work (L2) • Safe use of Pesticides (L2) • Additional safe use of specific equipment (L2) (relevant list in full above) • Full completion of on-course manual. 	<p>Assessment method 1: Online multiple choice test</p> <p>Assessment method 2: Practical Demonstration</p> <p>Assessment method 3: Professional Discussion</p> <p>Assessments to be taken in numerical order, 2 & 3 should not be attempted until 1 has been passed.</p>	Not Applicable

Gateway

The EPA should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard i.e. they have achieved occupational competence. 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. In addition to the employer's confirmation that the apprentice is working at or above the level in the occupational standard the apprentice must have completed the following gateway requirements prior to beginning EPA:

- English and mathematics at level 2

Apprentices must complete the following approved qualifications mandated in the standard:

- Emergency First Aid at Work
- Safe use of Pesticides
- Additional safe use of Pesticides in Boom Sprayer, Mounted, trailer or Self-propelled equipment OR Granular applicator equipment OR Handheld applicator equipment

Apprentices must complete a workbook during the apprenticeship. This will be tested during the professional discussion and will include:

- Dates the mandatory qualifications, as stipulated in the standard, are completed
- Records of quarterly appraisal meetings monitoring the progress of the apprentice, feedback given and guides to development.
- Entries maintained by the apprentice and endorsed by the employer/training provider that demonstrate development through the apprenticeship period
- Details of practical tests related to seasonal aspects of the apprentice's work.

Length of end-point assessment period:

All EPA assessment methods must be completed in six months.

Any supporting material required for the EPA should be given to the EPAO no later than seven days after the start of the EPA period.

If an EPA assessment method is failed, it should be retaken within the EPA period.

Roles and responsibilities

Role	Responsibility
Apprentice	<ul style="list-style-type: none"> • Attends work and training undertaking tasks set, including specified certificates. • Completes any homework required, revises for tests and attends any assessment appointments. • Completes their workbook with evidence.
Employer	<ul style="list-style-type: none"> • Provides the opportunities to learn. • Gives feedback on the apprentice's work and completes work appraisals quarterly; participates in consensus decision on the behaviours of the apprentice. • Communicates with the training provider to ensure that the apprentice is on track and supports the apprentice with building their workbook. • Provides pastoral care for the apprentice and decides the time for the end point assessment alongside the training provider.
Independent assessor	<ul style="list-style-type: none"> • Recruited and trained by the EPAOs from employers, industry and brings independence as they will not have had any prior involvement in the apprenticeship or with the apprentice. • Scores all components of the synoptic practical assessment, supervisory studies project and professional discussion. • Assesses against Pass and Distinction criteria. • Participates in annual standardisation events run by the EPAOs.
EPAO	<ul style="list-style-type: none"> • External and independent assessment of knowledge and practical competence through the examination requirement. • Brings independence as they will not have had any prior involvement in the apprenticeship or with the apprentice. • Brings added rigour and consistency to the assessment through their wider industry perspective, knowledge and experience. • Assesses online knowledge test against Pass and Distinction criteria. • Recruits independent assessors from employers, industry and training providers. • Trains, and hosts annual standardisation events for independent assessors. • The EPAO will combine the marks of the assessments and determine overall grade.

Training provider	<ul style="list-style-type: none">• Work to carry out a continuous review of the evidence generated by the apprentice as part of the on-programme assessment process and workbook completion.• Supports the employer and the apprentice to make sure that learning outcomes are achieved.• Structures the programme of learning and provides it for the apprentice and their employer.• Provides pastoral care for the apprentice and communicates with the employer regularly to make sure the apprentice is meeting their goals.• Marks the apprentices work and provides feedback to the apprentice and their employer.• Decides the time for the end point assessment alongside the employer.
Independent verifier	<ul style="list-style-type: none">• Appointed by the EPAO, they confirm the assessor grading and controls quality assurance procedures.

Internal Quality Assurance (IQA)

Internal quality assurance refers to the requirements that EPAO must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPAOs for this EPA must:

- appoint independent assessors who have knowledge of the following areas:
 - i) current, work based, occupational experience across the role
 - ii) a recognised qualification and proven competence in assessment
 - iii) correct and up to date CPD record relevant to the role being assessed
- appoint independent assessors will have recent relevant experience of the occupation/sector or significant experience of the occupation or sector.
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time
- operate regular standardisation events that enable independent assessors to attend a minimum of 1 per year
- operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 10 per cent of each independent assessors' assessments moderated

Affordability

Affordability of the EPA will be ensured by using the following practice:

- online testing
- Using an employer's premises

Assessment Methods

This section will outline the assessment methods the EPA will use to assess the knowledge, skills and behaviors (KSBs) required undertaking the duties as detailed in the occupational standard.

Assessment Method: 1 Online multiple choice test

This will include multiple choice questions. This involves apprentices taking a test under timed-conditions. The test can be computer based or paper based and will consist of 40 multiple choice questions based on scenarios with one correct question from 4 possible options.

How many questions of this type will be in the test?	How many marks will be awarded to each of this type of question?
40	1 mark each

Apprentices must have a maximum of 100 minutes to complete the test (unless the EPAO accepts special arrangements for that apprentice based, for example, on an official education or health plan). The test is closed book i.e. the apprentice cannot refer to reference books or materials. The multiple choice questions will be based on scenarios with one correct answer from four options.

Apprentices must take the test in a suitably controlled environment i.e. quiet space, free of distractions and influence, in the presence of an invigilator. The invigilator may be the assessor or another external person employed by the EPAO. There must be no more than 20 apprentices to a single invigilator.

The EPAO must verify the suitability of the venue for taking the test and the identity of the person taking the test.

Questions must be written by EPAOs and it is recommended that this be done in consultation with representative employers. EPAOs must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose. The questions relating to the underpinning knowledge must be varied.

Tests must be marked by independent assessors or markers employed by the EPAO following a marking guide produced by the EPAO. Alternatively, electronic marking is permissible.

It is recommended that the EPAO produce a question bank of sufficient size to prevent predictability

EPAOs will produce the following material to support this method:

Suitable computer access if using digital format or relevant paper based test - if internet access is required, availability and strength will need to be confirmed before assessment day.

List of supporting material required for this EPA assessment method: invigilation guidelines

Gateway requirements:

None

Grading for assessment method 1

Name of grade	Grade descriptor
Distinction	90% or over correct
Merit	80 - 89 % correct
Pass	70% - 79%

Assessment Method: 2 Practical demonstration

The practical demonstration may include practical tests or simulated tests designed to simulate the occupation's working environment. The practical demonstration will require the independent assessor to observe apprentices completing tasks.

Apprentices must be observed by an independent assessor completing three practical demonstration(s) over one working day. Independent demonstrations must be carried out over a maximum total assessment time of six hours. A 10% tolerance is allowed in the duration of the demonstration(s) to allow an activity to be completed, at the discretion of the independent assessor.

Each of the three demonstrations must be taken from the following list of tasks, with each demonstration focussing on a separate task. The practical assessment MUST include one task from core, one task from the relevant option plus a third task chosen at random from the available tasks. This will be decided by the EPAO. Three separate tasks should be observed to assess the skills being demonstrated and knowledge known (via the questions). There must be no duplication of task during the assessment day. Throughout each demonstration the Apprentice will describe what they are doing in detail to show their understanding of the process, potential implications if it was done incorrectly and what to do in sub optimal conditions all of which are required to achieve a grade above a pass. Suitable questioning, as per the guidelines, by the assessor can be used to probe this detail. Available tasks include:

Core Tasks	Promote and maintain health, safety and security
	Manage accurate records within the workplace
	Maintain and operate machinery and other equipment to allow safe and efficient operation
	Prepare seed bed/growing medium for maximum growth potential
	Carry out relevant establishment of crops for efficient growth
	Competently operate (to certified level) a relevant vehicle used in the business
	Control of pests, weeds and diseases including safe use, application and storage of chemicals
	Carry out plant nutrient application and/or irrigation tasks if applicable to aid growth of crop
	Carry out harvesting operations including assessment of timing and quality
	Appropriate harvesting techniques to match crop condition and quality requirements
	Operate to high levels of hygiene
	Store crops in suitable conditions to maintain quality
	Soil/substrate maintenance tasks to ensure efficient and healthy growth of the crop/plant
	Soil/substrate sampling and acting upon results as appropriate to ensure nutrition is correct
Option based Task	Correctly set machinery and monitoring machine performance for good seed establishment and or crop growth (SB)
	Correctly set machinery to match crop and soil condition and quality requirements during harvest (SB)

(SB = Soil based) (CB = Container based)	Maintenance of non-productive areas (SB)
	Optimise growth conditions for specific crops, based on the individual needs of the plant relative to environment (CB)
	Maintenance of productive and non-productive areas (CB)
	Plant removal (CB)

A rotation of tasks and some simulation may be required to avoid predictability of tasks due to the seasonal nature of work.

During the observation of the demonstrations the independent assessor must ask 12 questions (four per task). EPAOs will set open questions to assess related underpinning knowledge. Questioning must be completed within the total time allowed for the observation. Questions will be from a question bank developed by the EPOA.

At the end of the practical demonstration, three additional questions are to be asked in a maximum time of 30 minutes. These questions will specifically target the activities that cannot be demonstrated in the EPA because they are not feasible at that point in the year. The three questions will focus on one specific skill, which is seasonal by nature i.e. drilling, harvesting, soil maintenance and therefore demonstration is not a practical option during the practical demonstration itself. Questioning will establish that the apprentice understands the appropriate requirements and would be able to perform the task to the specified level (as described by the EPAO's marking guidelines)

KSBs observed and answers to questions must be documented by the independent assessor.

Apprentices must be provided with both written and verbal instructions on the tasks they must complete, including the timescales they are working to.

There may be breaks during the practical demonstration to allow the apprentice to move from one location to another. Demonstrations must be conducted in the employer's premises or other suitable venue selected by the EPAO. If the facilities/livestock on the employer's premises are not available the EPAO must select a venue with industry standard equipment that the apprentice would be familiar with (e.g. a training provider or another employer's premises).

The independent assessor may conduct and observe only one apprentice during this assessment method.

EPAOs will produce practical specifications to outline in detail how the practical demonstration will operate, what it will cover and what should be looked for. It is recommended that this is done in consultation with representative employers. Specifications must be determined and standardised by the EPAO. EPAOs must develop 'practical specification banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the specifications they contain, are fit for

purpose. The specifications, including questions relating to underpinning knowledge, must be varied, yet allow assessment of the relevant KSBs.

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

- Specifications for practical demonstrations designed to simulate the occupation's working environment
- Bank of questions
- Material to collect information to be used in marking and moderation

Gateway requirements

List of supporting material required for this EPA assessment method:

The relevant equipment that the apprenticeship is used to using in their day to day role (or have used routinely with the training provider), which is of standards routinely used in industry.

Grading for assessment method 2

Three skills from the required skills list will be assessed during the practical observation. Each one will be graded individually and grades combined to form the overall grade of this element, the criteria for this is below:

For the apprentice to achieve a:

- Pass: the apprentice must achieve a minimum of three passes
- Merit: the apprentice must achieve a minimum of two merits and one pass
- Distinction: the apprentice must achieve a minimum of two distinctions and one merit

The table below is only intended to provide EPAOs with a framework for grading and it is expected that detailed grading criteria will be developed for each skill using this as a guide. The descriptor refers to the level required per skill required in the standard. The table covers grades for all skills individually, of which only three will be assessed in one observation.

Name of grade	Grade descriptor
Pass	<p data-bbox="485 203 590 228">Correct</p> <ul style="list-style-type: none"> <li data-bbox="485 235 1797 297">- demonstration of safe working practices, risk assessment completed with limited understanding of legislation and responsibilities <li data-bbox="485 303 1520 329">- Information recorded logically, but no consistent approach, open to mistakes <li data-bbox="485 336 1797 397">- Equipment selected and used correctly. Machinery risk assessments meet requirements. Start up, maintenance and post operation requirements understood. Common faults identified <li data-bbox="485 404 842 430">- Records kept if required <li data-bbox="485 436 936 462">- Understanding of requirements <li data-bbox="485 469 1709 495">- Preparation of bed/growing medium to support establishment of crop and maximum growth <li data-bbox="485 501 716 527">- use of vehicle <li data-bbox="485 534 1010 560">- production of basic risk assessments <li data-bbox="485 566 1556 592">- start up, maintenance and post operation requirements known and understood. <li data-bbox="485 599 1052 625">- identification of common faults identified <li data-bbox="485 631 1184 657">- Aware of potential hazards while operating vehicle <li data-bbox="485 664 1188 690">- recognition of common pests, weeds and diseases <li data-bbox="485 696 1514 722">- understanding of the effect that common pest, weeds and disease can have <li data-bbox="485 729 905 755">- equipment /chemical chosen <li data-bbox="485 761 800 787">- application rate used <li data-bbox="485 794 1304 820">- requirements for control of pests, weeds and diseases used <li data-bbox="485 826 1430 852">- preparation of bed/growing medium to support maximum crop growth <li data-bbox="485 859 1310 885">- setting and use of machinery / equipment where appropriate <li data-bbox="485 891 1896 953">- harvest techniques demonstrated. Set up of machinery/equipment to ensure safety and ready for efficient harvesting <li data-bbox="485 959 1896 1021">- Correct method of storage and procedures identified and used. Can explain why this method will maintain the quality <p data-bbox="485 1073 957 1099">Soil based only - Correctly performs:</p> <ul style="list-style-type: none"> <li data-bbox="485 1105 1671 1131">- soil/substrate maintenance tasks using methods that would be optimal for the crop/plant <li data-bbox="485 1138 1539 1164">- soil/substrate sampling, interpreting results and utilising the relevant response <li data-bbox="485 1170 1860 1196">- sets machinery and monitors machinery effectively to ensure maximum crop establishment and growth <li data-bbox="485 1203 1759 1229">- sets machinery, relevant to crop needs / soil condition to achieve the right product specification <li data-bbox="485 1235 1142 1261">- Appropriate maintenance non-productive areas <p data-bbox="485 1313 995 1339">Container based crops only - Correctly:</p> <ul style="list-style-type: none"> <li data-bbox="485 1346 1310 1372">- demonstrate the optimal growth conditions for specific crops

- demonstrates correct maintenance of productive and non-productive areas
- removes plants

Merit

In addition to a pass criteria

- Is proactive with safety issues, fully understands legislation and their own responsibility
- Records information clearly, without mistakes
- Understands implications of incorrect machinery use/selection
- Demonstrates wider knowledge of plant requirements
- Can identify some actions to resolve common faults with equipment
- Ability to avoid risks while operating vehicle if required
- Knows scientific family names of common weeds
- Awareness of sub optimal harvesting clearly explained
- Demonstrates correct methods of preserving quality during harvest
- timing of harvest and quality identified
- methods of predicting timing and quality utilised
- Ideal harvest techniques demonstrated and clear understanding of the implications of not utilising optimum harvest techniques
- Reasoning provided about method choice, including benefits/disadvantages

Distinction

In addition to the merit criteria:

- Understands legislation and impact in the work place. Demonstrates dynamic risk assessments
- All information recorded in a consistent, effective, concise and clear way.
- Demonstrating detailed knowledge of relevant machinery and equipment. Machinery risk assessment and checks carried out efficiently
- Appropriate action recommended or carried out on common faults reported in records.
- Can apply knowledge and skill, so as to alter procedure/conditions if not perfect to maximise crop establishment
- Demonstrates detailed knowledge of relevant machinery and equipment.
- Can recommend/ carry out appropriate action on a range of faults
- Knows scientific family names of common pests, and diseases.
- Understanding of the implications of the pest/disease/weed on specific crops at different growth stages.
- Implications of sub optimal harvesting clearly explained.
- Can differentiate between the best method and others and explain the implications of other methods concisely.
- Relevant response to solid/substrate sampling utilised with reasoning.

In addition to the Pass criteria:

Soil Based - Can explain the implications of incorrectly:

- setting machinery when establishing plants
- setting machinery when harvesting crops
- maintaining non-productive areas

Container based - Can explain and demonstrate:

- the reasoning behind these choices for specific crops
- why some methods are better than others

Assessment Method: 3 Professional Discussion

This assessment method involves a structured verbal interaction between the apprentice and the independent assessor. The apprentice must demonstrate that they have achieved occupational competence by responding to questions set by the independent assessor and chosen from a bank of questions. This assessment method will take place in the form of a professional discussion.

The professional discussion must be appropriately structured to draw out the best of the apprentice's competence and excellence. One element (see B1 through to B12 in the mapping table) from all five behavioural topics (strong work ethic, adaptability, effective communicator, team working, safety awareness) will be required.

The independent assessors will conduct and assess the professional discussion and the independent assessor will be allowed to select questions based on their appraisal of the workbook, from a question bank developed by the EPAO

The professional discussion must last for 60 minutes and will take place on the same day/location as the practical demonstration. Additional interview time may be granted for apprentices with appropriate needs, for example where signing services are required.

A structured brief for the assessor and apprentice and a question bank must be developed by EPAOs. The structured brief should be no more than one side of A4 explaining to the independent assessor and the apprentice the structure of the discussion, time constraints, and the areas of the apprenticeship that will be questioned during the session. It is to be used to help the apprentice prepare and the independent assessor to understand the areas of work to be questioned. EPAOs must develop a question bank of sufficient size to prevent predictability and review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The specifications, including questions relating to underpinning knowledge, must be varied, yet allow assessment of the relevant KSBs.

EPAOs must ensure that apprentices are given an alternative structured brief in the case of re-sits/re-takes, this should include a different set of questions, but may cover the same KSB covered in the initial professional discussion.

Independent assessors must be developed and trained by the EPAO in the conduct of professional discussions and reaching consistent judgement. The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

The professional discussion may be observed by employer. The independent assessor will make the final grading decision.

The professional discussion can take place in employer's premises, other suitable venue selected by the EPAO (e.g. a training provider). The professional discussion should take place in a quiet room, free from distractions.

The EPAO must develop:

Structured briefs for the professional discussion

Bank of questions to test behaviours primarily, but also to cover prior learning and practical application

Gateway requirements for assessment method 3

List of supporting material required for this EPA assessment method:

A mandatory workbook will be completed during the apprenticeship to be tested during the professional discussion and will include:

- Details of the mandatory qualifications as stipulated in the standard.
- Records of quarterly appraisal meetings monitoring the progress of the apprentice provide feedback and guide development.
- Entries made by the apprentice and endorsed by the employer/training provider that demonstrates development through the apprenticeship period
- Details of practical tests, and their outcomes, related to seasonal aspects of the apprentice's work

Grading for assessment method 3

Each of the three areas within the professional discussion will be graded individually and combined for the overall grade of this element, the criteria for this is below: For the apprentice to achieve a:

Pass: the apprentice must achieve a minimum of four passes

Merit: the apprentice must achieve a minimum of three merits and one pass

Distinction: the apprentice must achieve a minimum of three distinctions and one merit

The table below is only intended to provide EPAOs with a framework for grading and it is expected that detailed grading criteria will be developed for each behaviour using this as a guide. The descriptor refers to the level required per behaviour required in the standard. The table covers grades for all behaviours individually, of which only three will be assessed in one discussion.

All of the grading descriptors are required to be met for a pass, merit and distinction relevant to each level.

Name of grade	Grade descriptor
Pass	<p>Explanations:</p> <ul style="list-style-type: none"> - are logical and plausible. - show comprehension and free from misunderstanding <ul style="list-style-type: none"> - explore connections. <p>Can demonstrate:</p> <ul style="list-style-type: none"> - a strong work ethic by examples of what they have achieved previously - adaptability relating to work patterns, projects, performance targets - principals of work related communication and communication channels in work place - communicating with different audiences such as staff, colleagues, management and clients / visitors - appropriate selection of communication method such as phone, email, face to face or letter - how they worked as a team - kept the team motivated - supported the wider business - proactive working/leading by example - logical choices resulting from risk assessments (H&S and environmental) - good choices in activity as a result of risk assessment - understanding relative to their role - effective communication of documents to staff
Merit	<p>In addition to pass criteria</p> <ul style="list-style-type: none"> - Evidence of clear causal links used in explanations - Clearly demonstrates good team work skills by providing examples <p>Understands:</p> <ul style="list-style-type: none"> - Choices made resulting from risk assessment and environmental show comprehensive understanding of the hazards and risks from health and safety and environmental perspective - the benefits and pitfalls of communication through different methods such as phone, face to face and via email - that individuals need to be supported in a team and the benefit of doing this for both the team and the wider business - Demonstrates evidence of a personal belief in a strong health and safety culture on site

Distinction	<p>In addition to the merit criteria:</p> <p>Can explain clearly and concisely:</p> <ul style="list-style-type: none">- concepts and theories decisions taken and application to new situations- the issues arising if a work ethic is missing and can offer solutions which could be applied to improve the situation- the benefits of staff being adaptable, the problems that can arise when staff aren't and can offer potential solutions to resolve this- how communication should differ dealing with staff, colleagues, management, clients / visitors. Examples of this given from the work place
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RE-SITS

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that a re-sit or re-take is an appropriate course of action.

Any assessment method re-sit or re-take must be taken during the maximum EPA period, otherwise the entire EPA must be retaken, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to merit/distinction or merit to distinction. Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of Distinction, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

An apprentice who fails an assessment method will be required to re-sit any failed assessment methods only.

Order of assessment methods

Are the EPA methods and components to be taken in a specific order?

The assessment methods need to be delivered in the order in which they are presented in this plan.

Mapping of KSBs

KSB code	KSB statement	Methods mapped against
Knowledge		
K1	Health and safety legislation and codes of practice in relation to the job role/workplace including contingency/emergency plans	Assessment method 1
Knowledge		
K2	Practical health and safety information to ensure everyone is safe in the workplace	Assessment method 1, Assessment method 2
Knowledge		
K3	Environmental issues/legislation, codes of practice and company policies	Assessment method 1
Knowledge		
K4	Importance of maintaining systems for record keeping and storage used within the organisation	Assessment method 1
Knowledge		
K5	Maintenance/efficient use of machinery and equipment	Assessment method 1 Assessment method 2
Knowledge		
K6	Preparation methods, timing of activities and aftercare requirements for the crops grown on-site	Assessment method 1
Knowledge		
K7	Crop identification and establishment process including principles and methods	Assessment method 1 Assessment method 2
Knowledge		
K8	Principles of plant growth and development and plant health	Assessment method 1
Knowledge		
K9	Input costs, cost of production, margins and impact on business profitability	Assessment method 1
Knowledge		
K10	Identification of key pests weeds and diseases and awareness of control mechanisms including potential impact on environment	Assessment method 1 Assessment method 2
Knowledge		
K11	Relationship between environmental conditions (including weather), plant protection methods and crop growth	Assessment method 1

Knowledge		
K12	Importance of maintaining good standards of hygiene and environmental control relating to crop/food storage (where relevant)	Assessment method 1
Knowledge		
K13	Quality standards and specifications relevant to their business and their importance	Assessment method 1
Knowledge		
KSB1	Impact of machinery on soil structure and potential damage.	Assessment method 1
Knowledge		
KCB1	Difference growing mediums and their impact/relevance to production on site	Assessment method 1
Skills		
S1	Promote and maintain health, safety and security	Assessment method 2
Skills		
S2	Manage accurate records within the workplace	Assessment method 2
Skills		
S3	Maintain and operate machinery and other equipment to allow safe and efficient operation	Assessment method 2
Skills		
S4	Prepare seed bed/growing medium for maximum growth potential	Assessment method 2
Skills		
S5	Carry out relevant establishment of crops for efficient growth	Assessment method 2
Skills		
S6	Competently operate (to certified level) a relevant vehicle used in the business	Assessment method 2
Skills		
S7	Control of pests, weeds and diseases including safe use, application and storage of chemicals	Assessment method 2
Skills		
S8	Carry out plant nutrient application and/or irrigation tasks if applicable to aid growth of crop	Assessment method 2
Skills		
S9	Carry out harvesting operations including assessment of timing and quality	Assessment method 2
Skills		
S10	Appropriate harvesting techniques to match crop condition and quality requirements	Assessment method 2
Skills		
S11	Operate to high levels of hygiene	Assessment method 2
Skills		
S12	Store crops in suitable conditions to maintain quality	Assessment method 2

Skills		
S13	Soil/substrate maintenance tasks to ensure efficient and healthy growth of the crop/plant	Assessment method 2
Skills		
S14	Soil/substrate sampling and acting upon results as appropriate to ensure nutrition is correct	Assessment method 2
Skills		
SSB1	Correctly set machinery and monitoring machine performance for good seed establishment and crop growth	Assessment method 2
Skills		
SSB2	Correctly set machinery to match crop and soil condition and quality requirements during harvest	Assessment method 2
Skills		
SSB3	Maintenance of non-productive areas	Assessment method 2
Skills		
SCB1	Optimise growth conditions for specific crops, based on the individual needs of the plant relative to environment	Assessment method 2
Skills		
SCB2	Maintenance of productive and non-productive areas	Assessment method 2
Skills		
SCB3	Plant removal	Assessment method 2
Behaviours		
B1	Strong work ethic including pride in work, attention to detail, integrity, honesty, time management, loyalty and respect for others	Assessment method 3 Assessment method 2
Behaviours		
B2	Positive attitude, motivated, dependable, ethical, responsible, flexible & reliable.	Assessment method 3
Behaviours		
B3	A willingness to learn and contribute to their own continuing professional development	Assessment method 3
Behaviours		
B4	Ability to take responsibility and be accountable for their own actions	Assessment method 3 Assessment method 2
Behaviours		
B5	Able to adapt to change in environmental conditions, technologies, situations and working environments	Assessment method 3
Behaviours		

B6	Willingness to accept changing priorities and work patterns when new jobs need to be done, or requirements change	Assessment method 3
Behaviours		
B7	Being a clear and effective communicator	Assessment method 3 Assessment method 2
Behaviours		
B8	Able to give/receive information and instruction accurately and in a timely and positive manner	Assessment method 3 Assessment method 2
Behaviours		
B9	Work and contribute effectively in a team and wider business	Assessment method 3
Behaviours		
B10	Willing to use own initiative and lead by example	Assessment method 3
Behaviours		
B11	Work proactively with internal and external people to achieve positive outcomes	Assessment method 3
Behaviours		
B12	Embrace a safety culture and apply proactively for self, colleagues and visitors	Assessment method 3 Assessment method 2