

Apprenticeship Standard for Crop Technician

With over 150,000 businesses, the agriculture and horticulture industries form the vital starting point for both the food and landscaping industries which account for over 14% of the British GDP. As a result they offer exciting and varied careers in the UK and abroad. The industry provides unique opportunities for people to work in a technically advanced and innovative environment. Businesses within the industry range from small enterprises through to international organisations. Work in soil based systems involves operating large, technically advanced machinery in the open fields. Working outdoors, means there is variety and challenges to overcome. Similarly Crop Technicians working in container based systems may work outside but for many the majority of work will be in controlled environments, which need monitoring and adapting to suit the growth stage/species growing.

As a Crop Technician you will be responsible for optimising crop/plant yields through establishment, management, harvest and post-harvest operations, while maintaining and improving the surrounding environment. You will also need to keep up to date with technological advances and new innovations. Being a Crop Technician requires self-motivation and the ability to work both independently and as a team player to complete tasks safely and efficiently. Many companies now use automation for a number of routine tasks, which will require technical skills to operate. This standard provides the opportunity for individuals to acquire the 'knowledge', 'skills' and 'behaviours' required and follows a 'core and options' approach. This allows the flexibility to learn core subjects and then specialise in either 'soil based system' or 'containerised systems'.

Core Skills		Option - Soil based system	Option - Container based system
Overarching	<ul style="list-style-type: none"> 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 	<p>Soil based systems are used to grow a wide variety of crops in fields. This includes cereals, oilseeds, a number of vegetables and fruit trees. Production is dependent on the natural resources and physical inputs (plant nutrients etc) and very reliant on the weather which has a significant impact on the growth and ultimate management of a crop. This means you must have the knowledge and ability to adapt at short notice to ensure a high quality product.</p> <p>Specific skill requirements:</p> <ul style="list-style-type: none"> Correctly set machinery and monitoring machine performance for good seed establishment and crop growth Correctly set machinery to match crop and soil condition and quality requirements during harvest Maintenance of non-productive areas <p>Specific knowledge requirements:</p> <ul style="list-style-type: none"> Impact of machinery on soil structure and potential damage. 	<p>Container based systems are generally used within horticulture to grow plants and trees but can also be used for fruit production. In a containerised system, the environment is 'managed' and it is likely you will spend a proportion of your time indoors. Container production will involve monitoring and caring for vast numbers of plants on an individual basis, requiring good observational skills and attention to detail.</p> <p>Specific skill requirements:</p> <ul style="list-style-type: none"> Optimise growth conditions for specific crops, based on the individual needs of the plant relative to environment Maintenance of productive and non-productive areas Plant removal <p>Specific knowledge requirements:</p> <ul style="list-style-type: none"> Different growing mediums and their impact/relevance to production on site.
Crop Establishment	<ul style="list-style-type: none"> Prepare seed bed/growing medium for maximum growth potential Carry out relevant establishment of crops for efficient growth 		
Vehicle Operation	<ul style="list-style-type: none"> Competently operate (to the equivalent of a certified level) a relevant vehicle used in the business 		
Crop Management	<ul style="list-style-type: none"> 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 		
Harvest	<ul style="list-style-type: none"> 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 		
Storage	<ul style="list-style-type: none"> Store crops in suitable conditions to maintain quality 		
Maintenance and Preparation	<ul style="list-style-type: none"> 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 		

Knowledge	Behaviours	Further Information				
<ul style="list-style-type: none"> • Health and safety legislation and codes of practice in relation to the job role/workplace including contingency/emergency plans • Practical health and safety information to ensure everyone is safe in the workplace • Environmental issues/legislation, codes of practice and company policies • Importance of maintaining systems for record keeping and storage used within the organisation • Maintenance/efficient use of machinery and equipment • Preparation methods, timing of activities and aftercare requirements for the crops grown on-site • Crop identification and establishment process including principles and methods • Principles of plant growth and development and plant health • Input costs, cost of production, margins and impact on business profitability • Identification of key pests weeds and diseases and awareness of control mechanisms including potential impact on environment • Relationship between environmental conditions (including weather), plant protection methods and crop growth • Importance of maintaining good standards of hygiene and environmental control relating to crop/food storage (where relevant) • Quality standards and specifications relevant to their business and their importance 	<p>Apprentices need to develop a diverse set of personal skills and behaviours to ensure success in their chosen profession. These include:</p>	<table border="1"> <tr> <td>Entry requirements</td> <td>There are no previous qualifications required to start this apprenticeship, but you must have the attitude and ability to develop the required skills and knowledge during the apprenticeship. This will usually be tested via an application/interview process.</td> </tr> </table>	Entry requirements	There are no previous qualifications required to start this apprenticeship, but you must have the attitude and ability to develop the required skills and knowledge during the apprenticeship. This will usually be tested via an application/interview process.		
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	Strong work ethic	<ul style="list-style-type: none"> • Strong work ethic including pride in work, attention to detail, integrity, honesty, time management, loyalty and respect for others • Positive attitude, motivated, dependable, ethical, responsible, flexible and reliable. • A willingness to learn and contribute to their own continuing professional development • Ability to take responsibility and be accountable for their own actions 	<table border="1"> <tr> <td>Progression</td> <td>On completion of this apprenticeship, Crop technicians will have the opportunity to progress within the industry into roles such as unit/arable manager, production manager, farm manager.</td> </tr> </table>	Progression	On completion of this apprenticeship, Crop technicians will have the opportunity to progress within the industry into roles such as unit/arable manager, production manager, farm manager.	
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	Adaptability	<ul style="list-style-type: none"> • Able to adapt to change in environmental conditions, technologies, situations and working environments • Willingness to accept changing priorities and work patterns when new jobs need to be done, or requirements change 	<table border="1"> <tr> <td>Level</td> <td>Level 3</td> </tr> </table>	Level	Level 3	
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Effective communicator	<ul style="list-style-type: none"> • Being a clear and effective communicator • Able to give/receive information and instruction accurately and in a timely and positive manner 	<table border="1"> <tr> <td>Duration</td> <td>Typically 24 months</td> </tr> </table>	Duration	Typically 24 months		
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Team working	<ul style="list-style-type: none"> • Work and contribute effectively in a team • Willing to use own initiative and seek help when appropriate • Work proactively with internal and external people to achieve positive outcomes 	<table border="1"> <tr> <td>Certificates*</td> <td> Level 2 Awards in: <ul style="list-style-type: none"> • Emergency First Aid at Work • Safe Use of Pesticides <i>On completion of the pesticides foundation unit above also choose one of the following units:</i> <ul style="list-style-type: none"> • Boom sprayer, mounted, trailed or self-propelled equipment • Granular applicator equipment • Handheld applicator equipment Apprentices without Level 2 English and Maths will need to achieve this level prior to taking the end point assessment. </td> </tr> </table>	Certificates*	Level 2 Awards in: <ul style="list-style-type: none"> • Emergency First Aid at Work • Safe Use of Pesticides <i>On completion of the pesticides foundation unit above also choose one of the following units:</i> <ul style="list-style-type: none"> • Boom sprayer, mounted, trailed or self-propelled equipment • Granular applicator equipment • Handheld applicator equipment Apprentices without Level 2 English and Maths will need to achieve this level prior to taking the end point assessment.		
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Safety awareness	<ul style="list-style-type: none"> • Embrace a safety culture and apply proactively for self, colleagues and visitors 	<table border="1"> <tr> <td>Alternative job titles</td> <td>Arable technician, Horticulture operative.</td> </tr> <tr> <td>Review Date</td> <td>2 years from implementation date</td> </tr> </table>	Alternative job titles	Arable technician, Horticulture operative.	Review Date	2 years from implementation date
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*these certificates are to be gained during the apprenticeship, unless the apprentice already holds them.