

**Food and Drink
Advanced Process Operator
Apprenticeship Standard
Level 3**

End-point Assessment Plan

Food and Drink Advanced Process Operator Apprenticeship Standard

Summary of Apprenticeship

The Food and Drink Advanced Process Operator apprenticeship is an integrated programme of knowledge and skills acquisition, developed alongside core behaviours expected of a competent advanced process operator working in a commercial setting. The award of the apprenticeship certificate will signify recognition of competence in the role. Apprentices will typically spend 30-36 months working towards the apprenticeship standard, with the end-point assessment completed in a maximum 12-week period at the end of the apprenticeship. Performance in the end-point assessment will determine the apprenticeship grade of fail, pass, merit or distinction.

There are no pre-requisite entry requirements for this programme. Apprentices without English and maths at level 2 must achieve level 2 English and maths prior to taking their end-point assessment.

Prior to the end-point assessment, apprentices will undertake a structured period of on-programme training to develop the knowledge, skills and behaviours required of the standard. Achievement of a Level 3 Diploma in Food and Drink Operations, which includes grading at fail, pass, merit or distinction, is a pre-requisite to taking the end-point assessment.

End-point assessment will be conducted by an independent Apprentice Assessment Organisation (AAO). AAOs must be on the Education & Skills Funding Agency's (ESFA) Register of Apprentice Assessment Organisations (RoAAO) for this standard.

The end-point assessment will include three distinct components:

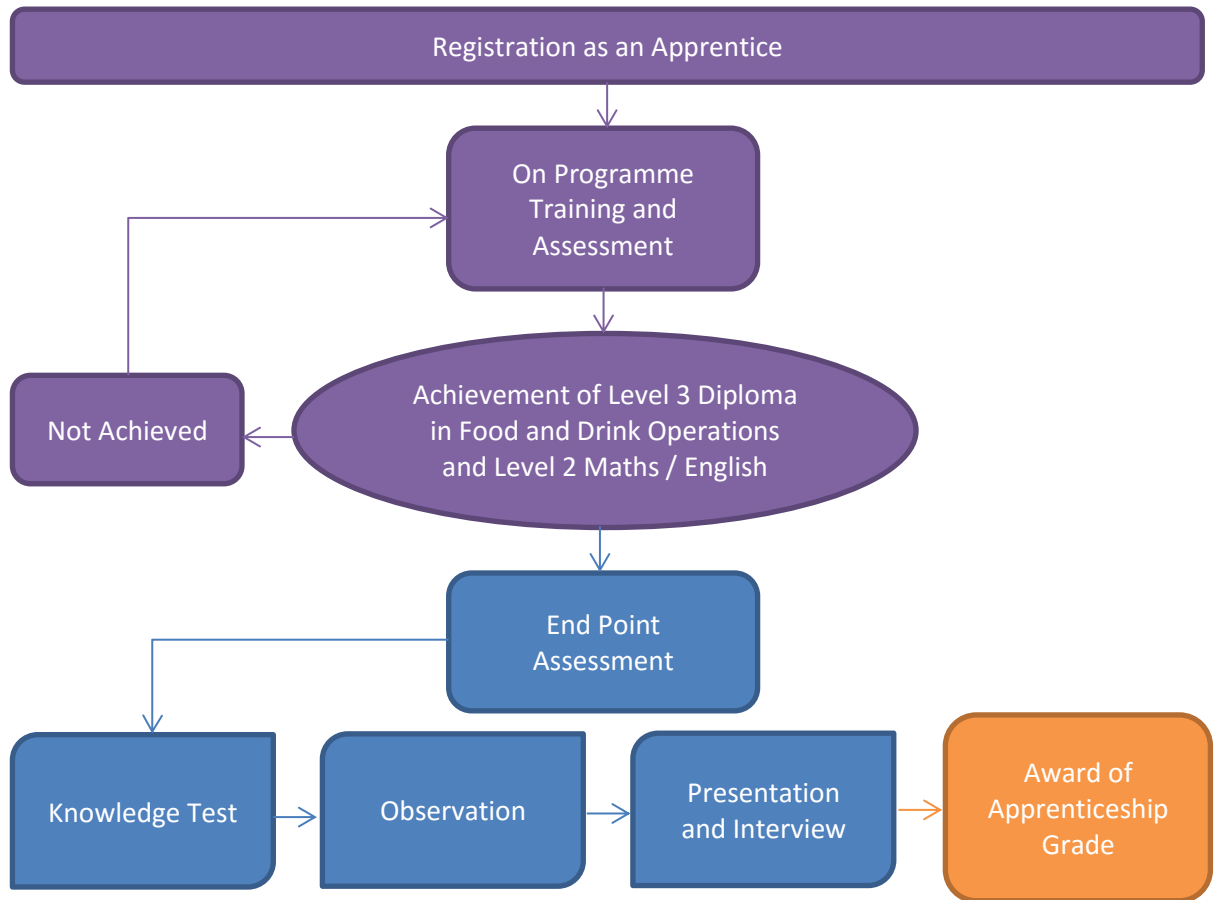
- A **written knowledge test** answered through a combination of multiple choice questions and extended answer questions
- An **observation**
- A **presentation and interview**

The assessments must be taken in this order and apprentices must pass each component before taking the next.

To achieve final certification, the apprentice must have completed and achieved a minimum of a pass in each end-point assessment component.

A pass in the end-point assessment will demonstrate that the apprentice can apply the knowledge, skills and behaviours required by the standard and will satisfy the requirements for the award of an apprenticeship certificate. Apprentices achieving a merit or distinction will be demonstrating performance above the requirements of the standard.

Summary of Apprenticeship



End-point Assessment Overview

Assessment Method	Summary of Assessment	Assessed by	Grading	Weighting
Knowledge Test	<i>The knowledge test will assess all of the knowledge statements within the standard.</i>	Apprenticeship Assessment Organisation	Pass Merit Distinction	15%
Observation	<i>Apprentices will be observed in the workplace and assessed against a range of knowledge, skills and behaviours.</i>	Apprenticeship Assessment Organisation	Pass Merit Distinction	55%
Presentation and Interview	<i>Apprentices will be asked to present on how Continuous Improvement Techniques can be applied in the workplace and this will be combined with an interview to test a range of knowledge, skills and behaviours.</i>	Apprenticeship Assessment Organisation	Pass Merit Distinction	30%

Assessment Gateway

Before completing the end-point assessment an apprentice must have completed and achieved a pass as a minimum in the Level 3 Diploma in Food and Drink Operations.

Individuals must also have passed level 2 English and maths.

Judgement on whether the apprentice is ready for the end-point assessment lies with the employer, who may wish to take advice from the learning provider.

End-point Assessment

Knowledge Test

The knowledge test will be administered and marked by an independent assessor from the AAO. The written test will represent the start of the maximum 12-week period of the end-point assessment. The knowledge test assesses the underpinning knowledge and understanding of the apprentice through multiple choice questions and extended answer questions to industry scenarios when working as a Food and Drink Advanced Process Operator. The questions will be presented in two sections, a core multiple choice question (MCQ) format (30 questions 1 mark each), and extended answer questions (5 questions 6 marks each).

The assessment will be undertaken under controlled conditions within a 90-minute time limit (it may be paper based or undertaken as an online or computer based test).

All knowledge areas will be tested and MCQs can be drawn from all statements. Extended answer questions will be drawn from the knowledge specified below:

- monitoring and assessing risks
- asset care
- data analysis and food operations
- continuous improvement
- incident management
- internal and external audits
- high quality systems
- environmental management systems
- health and safety systems
- food science and technology
- planning and stock control.

The knowledge test will result in a fail, pass, merit or distinction grade and it will contribute 15% to the weighting of the final apprenticeship grade.

The grading threshold will be as set out in the table below:

Acceptable achievement – Pass	Good achievement - Merit	Outstanding achievement - Distinction
>40 marks out of 60	>50 marks out of 60	>55 marks out of 60

Candidates achieving between 25 and 40 correct marks may re-sit the assessment on one further occasion within the 12-week end point assessment period. It is expected that candidates achieving less than 25 correct marks will need to undertake a period of further learning and will not be allowed to re-take the assessment until after completing a professional review of performance with their employer/training provider.

Observation

Each apprentice candidate will be observed in the workplace by the independent assessor undertaking a variable range of process tasks from the standard. It will include the opportunity for questioning to clarify knowledge and understanding being applied. The observation will take place over a maximum 4-hour period. The observation must be carried out over a minimum of 2 sessions; timings will depend on the needs of the employer and the opportunity to carry out relevant observations. These sessions can take place on the same day.

It will be carried out after the knowledge test and before the presentation and interview. During the observation the apprentice should have the opportunity, if required, to move from one area/function of the business to another in order to best demonstrate how they have applied their knowledge, skills and behaviours in a real-work environment to achieve genuine and demanding work objectives. The independent assessor can ask supplementary questions to cover any area of the knowledge, skills or the behaviour statements which are not captured through the observation, within the maximum 4-hour assessment period.

The observation will assess the following aspects of the standard:

Knowledge

- Principles of monitoring and assessing risks, including Hazard Analysis and Critical Control Points (HACCP)
- Principles of data analysis and food operations
- Principles of high quality systems
- Principles of health and safety systems

Skills

- Ensure compliance with Health and Safety regulations, e.g. Isolation and Lock off, guarding, PPE, Manual Handling
- Contribute to risk assessment
- Analyse and report data
- Interpret and implement Standard Operating Procedures and Technical Compliance procedures to ensure working towards best practices
- Carry out routine and specialist maintenance of equipment, in line with organisational guidelines
- Carry out testing for quality control

Behaviours

- Safe working: ensures safety of self and others, food safe, challenges safety issues
- Ownership of work: accepts responsibility, is proactive, plans work
- Pride in work: aims for excellence, time management
- Integrity and respect: respect for colleagues, adapts style where appropriate
- Effective communicator at all levels

The observation must be scheduled when the apprentice will be working in their normal place of work or simulated food processing environment and will:

- Be conducted at a time/in a way that reflects typical working conditions
- Allow the apprentice to demonstrate all aspects of the standard being assessed
- Take a synoptic approach to observing the overall competence

The independent assessor will plan the observation in conjunction with the apprentice and employer. They will use the assessment tools and procedures that are set by the AAO to record the observation and questioning.

The observation will result in a fail, pass, merit or distinction grade and it will contribute 55% to the weighting of the final apprenticeship grade.

All knowledge, skills and behaviours assessed in the observation must be satisfactorily achieved to pass the observation.

Knowledge, Skill or Behaviour	Statement	Pass – 1 point	Merit – 2 points	Distinction – 3 points
Knowledge	Principles of monitoring and assessing risks, including Hazard Analysis and Critical Control Points (HACCP)	Demonstrates an understanding of the principles of monitoring and assessing risks including HACCP	Demonstrates an understanding of the Critical Control Points in their own area of the business and how compliance contributes to food safety of their product	Demonstrates an understanding of Critical Controls points which are not required for their own business and how compliance contributes to food safety of a range of products
Knowledge	Principles of data analysis and food operations	Demonstrates an understanding of the principles of data analysis and food operations	Demonstrates an understanding of key performance indicators of their own area of the business and how these KPIs impact on business profitability	Demonstrates an understanding of a range of KPIs throughout their business and how their actions can directly affect the profitability of the whole business

Knowledge	Principles of high quality systems	Demonstrates an understanding of the principles of high quality systems	Can identify quality systems currently in place in their own area of the business and how they contribute to ensuring quality of product	Can identify a range of quality systems and how they can be implemented to improve product quality in an environment with which the apprentice is unfamiliar
Knowledge	Principles of health and safety systems	Demonstrates an understanding of health and safety systems	Can identify health and safety systems currently in place in their own area of the business and how they contribute to the health and safety of the workforce	Can identify a range of health and safety systems and how they can be implemented to improve the health and safety of the workforce in an environment with which the apprentice is unfamiliar
Skill	Ensure compliance with Health and Safety regulations, e.g. Isolation and Lock off, guarding, PPE, Manual Handling	Ensures compliance with Health and Safety regulations as appropriate to the activities being observed	Consistently complies with Health and Safety regulations appropriate to task and challenges others who do not	Consistently complies with Health and Safety regulations appropriate tasks, challenges others who do not and suggests areas for improvement
Skill	Contribute to risk assessment	Contributes to risk assessment	Challenges existing ways of working and suggests improvements to existing risk assessments	Contributes to risk assessments for new equipment and processes and suggests improvements to existing processes
Skill	Analyse and report data	Analyses and reports data as appropriate to	Actively monitors current key performance indicators for	Identifies root cause of non-compliance with key performance

		activities being observed	area of responsibilities and identifies areas of non-compliance	indicators and puts forwards suggestions to improve current business performance
Skill	Interpret and implement Standard Operating Procedures and Technical Compliance procedures to ensure working towards best practices	Interprets and implements Standard Operating Procedures and Technical Compliance procedures to ensure working towards best practices as appropriate to activities being observed	Updates existing Standard Operating Procedures for current area of expertise	Write and implement Standard Operating Procedure for new equipment or process or area with which the apprentice is unfamiliar
Skill	Carry out routine and specialist maintenance of equipment, in line with organisational procedures	Carries out routine and specialist maintenance of equipment, in line with organisational procedures	Identifies basic faults and causes with equipment they use on a regular basis	Challenges current routine maintenance schedule and puts forward suggestion to improve overall equipment efficiency
Skill	Carry out testing for quality control	Carries out testing for quality control as appropriate to the activity being observed	Challenges existing process when stated quality standard not being met and takes appropriate action to remedy	Suggests process improvement to maintain or improve product quality
Behaviour	Safe working:	Ensures safety of self and others, food safe, challenges safety issues	Consistently ensures safety of self and others; spots and challenges unsafe behaviour	Identifies and communicates potential safety, health or other risks across teams and departments; takes appropriate action when others are not behaving safely

Behaviour	Ownership of work:	Accepts responsibility, is proactive, plans work	Takes ownership of own work; takes a structured approach to planning and prioritising work and reviews progress against plans	Proactively plans to maximise performance; effectively prioritises and re-prioritises work to meet objectives
Behaviour	Pride in work:	Aims for excellence, demonstrates good time management	Consistently uses time proactively and anticipates problems which may cause delays to work plans or compromise to quality	Actively reviews performance with a critical eye and looks for ways to improve performance on site
Behaviour	Integrity and respect:	Shows respect for others, adapts style where appropriate	Consistently shows respect for others, listens and will question and challenge appropriately	Actively encourages others to respect the values of others, listens and questions to enhance own and others understanding
Behaviour	Effective communication:	Uses a range of visual and verbal communication techniques	Effectively uses a range of communication techniques and demonstrates effective listening skills	Reviews effectiveness of and recommends improvements for different methods of communication; demonstrates effective influencing skills

Each element is scored one point for pass, two points for merit and three points for distinction based on the assessment criteria given in the table above. For the observation, to achieve a pass the apprentice must achieve a minimum score of 15 points. Please see the table below for the scoring and grading rules which must be applied when allocating the grade for the observation:

Pass	Merit	Distinction
15-22 points	23-37 points	38-45 points

Presentation and Interview

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The presentation and interview is a formal presentation and structured discussion between the apprentice and an independent assessor. It is recommended that the independent assessor conducting the professional discussion is not the same person who carried out the observation assessment. Apprentices can only undertake the presentation and interview component once a pass as a minimum has been achieved in each of the other two end-point assessment components.

The apprentice will be asked to present on how continuous improvements can be applied in the workplace and will be able to draw on examples acquired within the on programme learning period or the end point assessment period. The presentation should cover the following:

- The understanding of CI Techniques which can be used
- Examples of how these techniques can be applied in their workplace
- The identification of the factors which are critical to ensuring continuous improvement practices are embedded in the workplace

The presentation and interview must be conducted in a controlled environment i.e. a quiet room, away from the normal place of work but is expected to be held on their employer's premises – other venues may be sourced if necessary. The presentation will typically last 30 minutes and be no more than 45-minutes duration. The apprentice can use a range of visual aids including slides, spreadsheets, graphs and photographs where appropriate.

The interview must be appropriately structured to draw out the best of the apprentice's competence and excellence.

The interview will typically last 45 minutes and be no more than 60-minutes duration.

Independent assessors will select six questions from a bank of standardised competency based questions to ensure a consistent approach is adopted, as well as ensuring all required areas of the standard are appropriately covered. The bank of competency based questions will focus on the behaviours and skills, as shown below.

A structured brief and question bank will be developed by AAOs and independent assessors will be developed and trained in the art of professional discussions and reaching consistent judgement.

The presentation and interview will specifically assess the following aspects of the standard

Knowledge

- How to identify and resolve technical problems (including products, equipment and safety) in line with organisational processes
- Principles of:
 - data analysis and food operations
 - continuous improvement

Skills

- Analyse and report data

- Anticipate potential problems or delays and plan accordingly
- Use problem solving techniques to eliminate root cause of problems
- Execute incident management protocols
- Support a variety of internal audits
- Participate in external audits, in line with organisational procedures
- Take part in mentoring, buddying and on-the-job training

Behaviours

- Self-development: proposes objectives to support the business, seeks learning, drives the development of self and others
- Working in a team: builds good relationships with others, works collaboratively, contributes ideas and challenges appropriately, leads by example
- Problem solving: works to identify and ensure root causes are resolved, demonstrating a tenacious approach
- Responsiveness to change: flexibility to changing working environment and demands
- Company/industry perspective: desire to learn about the company and food industry, acts as an ambassador
- Demonstrates and encourages curiosity to foster new ways of thinking and working
- Acts in alignment with the business vision and values

The presentation and interview will result in a pass, merit or distinction grade and it will contribute 30% to the weighting of the final apprenticeship grade.

All knowledge, skills and behaviours criteria assessed in the presentation and interview must be satisfactorily achieved to pass this end-point assessment component. The grading criteria for the presentation and interview are as follows:

Knowledge, Skill or Behaviour	Statement	Pass – 1 point	Merit – 2 points	Distinction – 3 points
Knowledge and Skills	Application of Continuous Improvement in the Workplace (this will cover off the range of knowledge and skills from the Standard documented above)	Clear presentation demonstrating an understanding of CI techniques identifies at least 1 improvement for the workplace and a demonstration of how CI practices can be embedded in the workplace	Creative presentation, citing a range of CI techniques (at least 3), with thought provoking outcomes demonstrating a powerful impact and at least 2 improvements	Innovative presentation with detailed and complex overview with extensive and far reaching outcomes demonstrating very significant impact and well thought out identified improvements
Behaviour	Self-development:	Proposes objectives to support the business, seeks learning, drives the	Takes ownership for learning and practising new skills/ techniques/tools;	Proactively develops new skills; challenges and questions others to improve own

		development of self and others	constantly seeks to improve own understanding and learn from others; shares knowledge and experiences with others	understanding; encourages others to learn from experiences, supporting them when they make a mistake
Behaviour	Problem solving:	Works to identify and ensure root causes of problems are resolved, demonstrating a tenacious approach	Takes ownership for resolving problems and issues; demonstrates determination to see things through	Adopts a preventative approach to problem solving
Behaviour	Working in a team:	Builds good relationships with others, works collaboratively, contributes ideas and challenges appropriately	Builds excellent relationships with others, demonstrates knowledge and understanding of team goals	Contributes and willing to lead team based discussions/problem solving, puts team goals ahead of personal recognition
Behaviour	Responsiveness to change:	Demonstrates flexibility to changing working environment and demands	Demonstrates flexibility to get involved in different tasks; consistently reacts positively to changes and finds ways to support implementation	Looks to understand the reasons behind changes; constructively questions and challenges change; sets a positive example for others about change
Behaviour	Company/industry perspective:	Demonstrates knowledge of company and food industry, acts as an ambassador	Identified opportunities to improve own understanding of the company and wider food industry; sets an example to others	Proactively seeks to improve understanding of the company and wider food industry; actively seeks opportunities to promote the business

Behaviour	Innovation:	Demonstrates curiosity to foster new ways of thinking and working	Constructively challenges existing ways of working; volunteers to work across different areas of the business as appropriate	Recommends and implements changes to improve own work and work of others, capable of supporting others with change or learning new skill
Behaviour	Business vision and values	Acts in alignment with the business vision and values	Assists colleagues in acting in line with business vision and values	Actively communicates business vision and values to others

Each element is scored one point for pass, two points for merit and three points for distinction based on the assessment criteria given in the table above. For the presentation and interview, to achieve a pass the apprentice must achieve a minimum score of eight points. Please see the table

Pass	Merit	Distinction
8-10 points	11-17 points	18-21 points

Apprenticeship Grading

The final decision on whether the apprentice has passed the end-point assessment lies solely with independent assessors who will grade the apprenticeship according to the requirements set out in this plan. Independent assessors' decisions will be subject to moderation and verification by the AAO.

The apprenticeship grade will be based on the outcomes from the: knowledge test, observation and presentation and interview.

Each component of the end-point assessment is individually marked and awarded a fail, pass, merit or distinction based on the guidance given in this assessment plan. To achieve a pass overall the candidate must achieve a minimum of a pass in each of the end-point assessment components: knowledge test, observation and presentation and interview.

In order to achieve a grade above a pass candidates are required to achieve above a pass in their observation and one other area of the assessment totalling a minimum of 70% of the available weighting. To achieve a distinction, the individual must achieve more than a pass for all components. See the table below.

Knowledge Test (15%)	Observation (55%)	Project Interview (30%)	Overall Grade
Pass	Pass	Pass	Pass
Pass	Pass	Merit	Pass

Pass	Pass	Distinction	Pass
Merit	Pass	Pass	Pass
Merit	Pass	Merit	Pass
Merit	Pass	Distinction	Pass
Distinction	Pass	Merit	Pass
Distinction	Pass	Distinction	Pass
Pass	Merit	Pass	Pass
Merit	Merit	Pass	Merit
Pass	Merit	Merit	Merit
Merit	Merit	Merit	Merit
Merit	Merit	Distinction	Merit
Distinction	Merit	Merit	Merit
Distinction	Merit	Distinction	Merit
Pass	Merit	Distinction	Merit
Distinction	Merit	Pass	Merit
Pass	Distinction	Pass	Pass
Merit	Distinction	Pass	Merit
Pass	Distinction	Merit	Merit
Merit	Distinction	Merit	Merit
Distinction	Distinction	Pass	Merit
Pass	Distinction	Distinction	Merit
Distinction	Distinction	Merit	Distinction
Merit	Distinction	Distinction	Distinction
Distinction	Distinction	Distinction	Distinction

If the apprentice does not achieve as a minimum a pass in any part of the end-point assessment and it has to be re-taken, the apprentice cannot be awarded an overall distinction, the final grade will be capped at merit. It is expected that a period of further learning will need to be undertaken if the apprentice has to re-take any part of the end-point assessment. Exemptions will be made if the learner has not been able to pass a component of the end point assessment for reasons that are deemed by the AAO as beyond their control. In which case the AAO can choose to allow an apprentices grade to not be capped.

End-point Assessment Organisations

End-point assessment will be conducted an independent assessor working for an AAO on the ESFA's RoAAO.

The AAO will be responsible for:

- Design of a question bank for the knowledge test component
- Design of an observation assessment
- Design of a bank of competency based questions for the presentation and interview component.

The AAO will be required to employ suitably experienced assessment staff who are able to administer and assess in line with the requirements of the assessment plan.

The AAO will need to employ independent assessors who are capable of overseeing and undertaking these different elements of assessment:

- Review of any documentation from on-programme elements
- Administration and marking of the knowledge test
- Assessment of an apprentice's performance in the observation
- Leading and assessing the presentation and interview.

Independent assessors must be able to demonstrate they possess practical and up-to-date knowledge of current working practices appropriate to the sector in which they are carrying out assessment practice. They should hold or be working towards an assessor qualification. There are requirements to hold additional specialist training as required by the food and drink sector which is detailed below:

Mandatory Requirements	Independent Assessors
A minimum 5 years' relevant practical industry experience within food and drink operations	√
Qualified above the level they are assessing	√
Food Safety Level 4 qualification	√
HACCP Level 4 qualification	√

Internal Quality Assurance

Once assessment has been undertaken, the AAO will be responsible for:

- Moderation and verification of the knowledge test component
- Moderation and verification of independent assessor judgements of the observation component
- Moderation and verification of the independent assessor judgements of the presentation and interview component
- Standardisation of assessment judgements
- Secure recording and storage of all assessment decisions
- Verification of achievement of apprenticeship certificate
- Administration of certification process.

Moderation, verification and standardisation of the assessment judgements is part of the AAO's internal quality assurance system. The judgement of the independent assessor must be subject to moderation and verification by the AAO's quality assurance team.

The AAO will monitor the assessment process and verify the assessment judgements to ensure consistency across independent assessors and across employers. This must be performed on a risk basis, i.e. new or poorly performing independent assessors must have every element of every assessment quality assured, but established, high performing independent assessors can be quality assured on a sampling basis, with at least one

assessment activity per apprentice EPA being subject to either desk based or live internal quality assurance activity.

The AAO will run standardisation events for independent assessors at least every six months to ensure consistency in the practice of marking observations, knowledge tests and professional discussions.

An AAO will employ expert independent assessors, but must also have internal quality assurance mechanisms and staff to verify independent assessor decisions and to administer the awarding of the apprenticeship.

External Quality Assurance

External quality assurance for the food and drink advanced process operator apprenticeship will initially be undertaken by the Institute for Apprenticeships, whilst we are in conversation with Ofqual regarding them undertaking the role.

Implementation

This apprenticeship standard does not directly replace a current apprenticeship framework however, figures indicate starts in similar areas has been 400 in the past year. It is therefore anticipated that take up will be approximately 400 per year.

The end-point assessment will cost no more than 20% of the apprenticeship funding band.