

Standard for Food Technologist Apprenticeship

Section 1: Occupational Profile of a Food Technologist

Food Technologists work in one of the largest, most dynamic and fastest growing sectors of industry. Every day producers, food manufacturers and retailers make and sell millions of innovative food products, such as drinks, cakes, biscuits, ready to eat and ready to cook food, sandwiches, wraps and fresh fruit and salads to consumers in the UK and around the world. Food Technologists are passionate about their industry and ensure all products are safe to eat, of consistent appearance, taste, and texture and take great pride in their work.

There are many varied employment and career opportunities in the food science industry; within a laboratory based environment to ensure the safety and quality of food products, in development roles to improve existing products and launch new products, in factory based roles working with teams to develop good manufacturing practices and within the supply chain to develop good relationships with suppliers and customers. Food Technologists may be employed by a grower, in a large or small food manufacturer or by a retailer and there may be opportunity to travel extensively as part of their roles.

Whichever environment Food Technologists choose to work in, by the end of their programme, they will have developed a set of core skills, knowledge and behaviours to prepare them for an exciting and rewarding career in the food and drink industry. On completion of the programme, Food Technologists will be able to utilise their food science knowledge to ensure the smooth transition of food and drink products from farm to fork driving the manufacturing process ensuring that technical and quality standards are achieving whilst maximising profitability to meet customer requirements.

Individuals completing this programme will be ready to enter an industry offering many ongoing career development opportunities to suit their own particular interests, whether they aspire to being a Technical Manager of the future, a Quality, Process Development or New Product Development specialist or an Auditor.

Section 2: Food Technologist – The Essential Knowledge, Skills and Behaviours

At the end of their apprenticeship, Food Technologists will have gained the following knowledge:

Core Knowledge

- Legislation and regulations in the food and drink industry, including understanding of:
 - Food Safety
 - Health and Safety
 - Hazard Analysis and Critical Control Points (HACCP)
- Basic principles of environmental legislation
- Basic principles of microbiology: common food pathogens and toxins, food hygiene
- Basic principles of food chemistry: composition of food, food nutrition
- How to carry out sensory analysis
- Use and purposes of food industry standards (eg British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications)
- Internal and external audit processes used in food businesses
- How to collect, interpret and analyse data and complete documentation
- Principles of raw materials: specifications, supply, storage, handling and quality assurance
- The key principles of Continuous Improvement (CI) Management
- Management systems used in food businesses: Good Manufacturing Processes (GMP), Good Hygiene Practices (GHP), process flow and risk management
- Understanding of the drivers of costs and quality
- Methods of pest control and pest prevention
- The functions and processes used in new and existing product development (NPD and EPD)
- The food supply chain from end to end, and relationships within it
- Understanding of a range of problem solving techniques, to include root cause analysis and investigation methods
- Appreciation of ethical issues in the food industry
- Understanding of how to cost products

At the end of their apprenticeship, Food Technologists will demonstrate the following skills:

Core Skills

- Implement and maintain risk management systems (eg Hazard Analysis and Critical Control Points)
- Review and maintain technical procedures for food businesses
- Use a range of IT systems to analyse and interpret data to identify trends and drive Continuous Improvement (CI)
- Provide and interpret management data and information (reports and presentations)
- Carry out internal audits and participate in external audits
- Conduct sensory evaluation activities
- Investigate and resolve problems, including customer complaints and quality issues
- Contribute to Continuous Improvement (CI)
- Develop and maintain effective relationships with customers, suppliers and colleagues
- Act as a champion for the technical department within the wider business
- Carry out a product costing
- Support product trials
- Use problem solving techniques, to include root cause analysis and investigation methods
- Influence and negotiate with colleagues

At the end of their apprenticeship, Food Technologists will demonstrate the following behaviours:

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: integrity, aims for excellence, time management
- Self-development: proposes objectives to support the business, seeks learning, drives the development of self and others
- Integrity and respect: respect for colleagues, good communication at all levels, adapts style
- Working in a team: builds good relationships with others, works collaboratively, contributes ideas and challenges appropriately
- Problem solving: works to identify and ensure root causes of problems are resolved, demonstrating a tenacious approach
- Responsiveness to change: flexibility to changing working environment and demands
- Company/industry perspective: knowledge of company and food industry, acts as an ambassador
- Effective communication: in writing, visually and verbally
- Innovation: Demonstrates curiosity to foster new ways of thinking and working

Section 3: Food Technologist – Additional Information

Duration	Typically 24 to 30 months
Entry Requirements	There are no formal entry requirements for this programme
Level	Level 3
Qualification	There will be a new Level 3 qualification in Food Technology (new qualification in development)
Renewal	After 3 years
English and Maths	Apprentices without level 2 English and maths will need to achieve this level prior to completion of the apprenticeship