Department for Education

Health and Science Route

Example industry placement objective templates for:

- T Level in Health
- T Level in Healthcare Science
- T Level in Science

July 2020

Contents

T Level: Health
Occupational Specialism: Supporting Healthcare

Role Profile [INDICATIVE EXAMPLE]

<table>
<tr><td>Role Title</td><td>Working Pattern</td><td>To be agreed between the provider and employer</td></tr>
<tr><td>Supporting Healthcare Trainee</td><td>Duration</td><td>315 hours</td></tr>
<tr><td colspan="3">Objective(s)</td></tr>
<tr><td colspan="3">To support the healthcare team by carrying out clearly defined clinical and non-clinical duties to provide high quality person-centred care and support in order to promote patient wellbeing</td></tr>
<tr><td colspan="3">Typical Activities</td></tr>
<tr><td colspan="3">1. Work as part of a healthcare team (at least twice a week) to assist registered health professionals and others in the nursing family and multidisciplinary team to undertake a range of physiological measurement tasks such as: Blood pressure, Body temperature, Breathing rate, Pulse rate, Oxygen saturation or Blood sugar levels

2. Always practice effective infection control through the use a range of techniques for infection prevention and control, e.g. waste management, spillage, hand washing, use of Personal Protective Equipment (PPE), to ensure that the clinical environment is safe for staff and patients

3. Work as part of a healthcare team (at least twice a week) to assist with patients' overall comfort and wellbeing (opportunity should be provided to interact with a range of patients at least twice a week and to contribute to their overall comfort and wellbeing). This could include supporting activities of daily living, supporting mental or spiritual health</td></tr>
<tr><td colspan="2">Learning goals</td><td>TQ Reference</td></tr>
<tr><td colspan="2">On the placement the student will need to further develop and hone through activity 1:

Employability skills
• Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone
• Working with others with different skills, expertise and experience to accomplish a task or goal</td><td>[Insert corresponding reference from the TQ content]</td></tr>
</table>

• Contributing to a situation or a process to prevent potential adverse effects • Demonstrate an understanding and application of professional behaviours **Technical skills and understanding** • Skills in working in a person-centred way in a healthcare setting, that contributes to safeguarding and implementing duty of care and candour • Skills in working in a person-centred way in a healthcare setting, that demonstrates patient advocacy • Skills in promoting health and wellbeing, including supporting clients to make healthy choices • Skills in following all required standards, policies and procedures within the Health care setting including health and safety requirements and legislation • Application of understanding of the physiological states that are commonly measured: why, when and how these may be measured • Application of understanding about the correct equipment and instruments to use when undertaking physiological measurement • Skills in assisting registered nurses/registered health professionals to undertake a range of physiological measurement tasks using appropriate equipment • Application of any required mathematical skills when recording results from physiological measurements • Skills in recording the results of monitoring and measurement using relevant documentation/IT systems • Skills in using the “normal” values from patient monitoring and calculating early warning scores and discussing how/when to escalate findings • Application of understanding of the correct process for reporting measurements that fall outside of normal levels • Skills in supporting and observing staff in managing challenging behaviours, ensuring that personal safety, colleague safety and client safety are always maintained • Application of professional practice, including appropriate conduct in the clinical environment, appropriate dress and punctuality. • Skills in demonstrating the C 6’s in relation to Care /Compassion/Communication On the placement the student will need to further develop and hone through activity 2: **Employability skills**	

• Advanced communication skills: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal • Contributing to a situation or a process to prevent potential adverse effects **Technical skills and understanding** • Application of understanding of how to always work and deliver care in a person-centred way • Skills in following all required standards, codes of conduct and health and safety requirements/legislation including risk assessments and use of appropriate PPE • Skills in maintaining a safe and healthy working environment, taking appropriate action in response to incidents which could compromise infection prevention and control • Skills in the use of a range of techniques to ensure effective infection prevention and control in the healthcare environment, e.g. waste management, spillage, hand washing, and use of Personal Protective Equipment (PPE) • Application of professional practice, including appropriate conduct in the clinical environment, appropriate dress and punctuality. • Skills in demonstrating the C 6's in relation to Care /Compassion/Communication On the placement the student will need to further develop and hone through activity 3: **Employability skills** Advanced communication skills: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal • Contributing to a situation or a process to prevent potential adverse effects **Technical skills and understanding** • Application of understanding of evidence-based practice and ways of working in order to provide overall care which ensures individuals care and needs are met whilst maintaining their privacy and dignity • Skills in working in a person-centred way in a healthcare setting, that demonstrates patient advocacy • Skills in providing evidence-based person-centred care and support to patients, carers and relevant others	

• Skills in promoting clinical effectiveness and a positive experience for an individual and families receiving care • Skills in assisting with an individuals' overall comfort and wellbeing • Skills in the interpretation of care plans in order to meet individuals care and needs whilst maintaining the individual's privacy and dignity • Skills in promoting physical and mental health and wellbeing, providing opportunistic brief advice on health and wellbeing • Skills in promoting health and wellbeing, including supporting clients to make healthy choices • Application of professional practice, including appropriate conduct in the clinical environment, appropriate dress and punctuality. • Skills in demonstrating the C 6's in relation to Care /Compassion/Communication • Skills in supporting and observing staff in managing challenging behaviours, ensuring that personal safety, colleague safety and client safety are always maintained	
Minimum starting requirements	
• Attendance at induction day at the employer's premises • Health and Safety Training (Mandatory)	
Suggested prior learning	
• Knowledge of all relevant legislation, regulations and Health and Safety requirements in a healthcare setting • Knowledge of safeguarding requirements • Knowledge of the requirement to follow duty of care and candour at all times and how to apply these • Knowledge of infection prevention control techniques • Knowledge of techniques and equipment used in physiological measurements • Skills in carrying out physiological measurements in a simulated environment • Skills in providing person-centred care in a simulated environment • Knowledge of techniques used to ensure infection control and prevention • Skills in applying infection control and prevention measures in a simulated environment • Knowledge of current best /evidence-based practice in supporting individuals to meet their care and needs whilst maintaining dignity and privacy • Skills in interpreting care plans within a simulated environment • Typical workplace behaviours needed for role, including: ○ Punctuality	

- Appropriate dress
- Use of mobile phones/social media in relation to patient confidentiality
- Teamwork
- Importance of providing a high-quality person-centred approach to patient care

T Level: Healthcare Science
Occupational Specialism: Pharmacy Services

Role Profile [INDICATIVE EXAMPLE]

<table>
<tr><td>Role Title</td><td>Working Pattern</td><td>To be agreed between the provider and employer</td></tr>
<tr><td>Pharmacy services Trainee</td><td>Duration</td><td>315 hours</td></tr>
<tr><td colspan="3">Objective(s)</td></tr>
<tr><td colspan="3">To support the pharmacy team by providing exceptional customer service and products that are clinically suitable to promote patient wellbeing</td></tr>
<tr><td colspan="3">Typical Activities</td></tr>
<tr><td colspan="3">1.Support the pharmacy team, on a regular basis (at least twice a week), in carrying out biometric measurements to aid health promotion activities including:

• Height/weight (BMI)
• blood pressure,
• blood glucose,
• Carbon monoxide,
• blood lipids

2. Under supervision use pharmacy IT systems and other IT resources according to legislative requirements and organisational policies for labelling products, managing stock control, record keeping and prescription logging

3. Under supervision perform a range of administrative and retail activities within the pharmacy environment including completing sales transactions of over the counter medicines and displaying products to maximise sales</td></tr>
<tr><td colspan="2">Learning goals</td><td>TQ Reference</td></tr>
<tr><td colspan="2">On the placement the student will need to further develop and hone through activity 1:

Employability skills
• Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone
• Working with others with different skills, expertise and experience to accomplish a task or goal
• Assessing a situation or a process for potential adverse effects</td><td>[Insert corresponding reference from the TQ content]</td></tr>
</table>

Technical skills and understanding

- Understanding of the Health and Safety, Standard Operating Procedures and standards in the specific pharmacy environment
- Skills in following safe working practices, SOPs and required standards at all times when undertaking any activities when in the specific pharmacy environment
- Understanding of how and why biometric measurements and near patient testing are carried out in a pharmacy setting
- Skills in performing biometric measurements to aid health promotion activities
- Skills in promoting healthy lifestyles, when authorised to do so, providing information and advice on healthy eating, regular exercise, healthy weight, smoking cessation and limiting alcohol intake.
- Application of professional practice, including appropriate conduct in the pharmacy environment, appropriate dress and punctuality.

On the placement the student will need to further develop and hone through activity 2:

Employability skills

- Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone
- Working with others with different skills, expertise and experience to accomplish a task or goal
- Recording: transcribing, noting, capturing, saving and storing customer information

Technical skills and understanding

- Skills in using pharmacy IT systems and other IT resources according to legislative requirements and organisational policies for labelling products, managing stock control, record keeping and prescription logging
- Skills in handling patient information in line with local and national policies to meet all legislative and legal requirements and keep patient information confidential
- Skills in recognising and adhering to all legal and ethical responses in protecting and promoting the health of individual customers
- Application of professional practice, including appropriate conduct in the pharmacy environment, appropriate dress and punctuality.

On the placement the student will need to further develop and hone through activity 3: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal • Recording: transcribing, noting, capturing, saving and storing customer information **Technical skills and understanding** • Skills in providing all elements of person-centred care when providing any pharmaceutical care and/or advice, this includes promoting and advocating equality, diversity and inclusion and medicine optimisation • Application of understanding of diseases, disorders and minor illnesses to ensure most appropriate care and advice provided • Skills in dealing with all customers in a polite and courteous way • Skills in completing sales transactions, handling payments, adhering to relevant policies and procedures and principles of ethical selling • Skills in displaying products to maximise sales • Skills in identifying when a retail customer's condition should be referred to a clinical practitioner • Skills to undertake a range of administration activities as required within a pharmacy environment, such as paperwork in relation to controlled drugs, completing and checking invoices and orders, completing VAT returns • Skills in providing a caring approach to customer care • Skills in recognising and adhering to all legal and ethical responses in protecting and promoting the health of individual customers • Application of professional practice, including appropriate conduct in the optical environment, appropriate dress and punctuality	
Minimum starting requirements	
• Attendance at induction day at the employer's premises • Health and Safety Training (Mandatory)	

Required prior learning

• Knowledge of the existence and importance of Health and Safety regulations, Standard Operating Procedures and Quality standards within the pharmacy environment
• Understanding of the purpose of Biometric measurement testing why they are undertaken within a pharmacy environment
• Skills in a range of communication techniques
• Skills in greeting customers
• Skills in undertaking biometric measurements in a simulated environment
• Skills in providing person-centred care in a simulated environment
• Knowledge of what the main IT systems commonly used in pharmacies are and what they are used for.
• Knowledge of the importance of security of IT systems and the awareness of the existence of organisational policies for IT use
• Skills in using IT systems for pharmacy activities in a simulated environment
• Knowledge of the regulations in relation to handling information in a pharmacy environment, particularly in relation to confidentiality and security.
• Knowledge of the types of retail activities within pharmacy environments
• Knowledge of the main administrative duties within a pharmacy environment
• Skills in completing administrative duties within a simulated environment
• Knowledge of the principles of selling pharmacy products and displaying products
• Understanding of the principles and skills of ethical selling
• Knowledge of the range of different retail products available in the pharmacy environment
• Typical workplace behaviours needed for role, including:
  ○ Punctuality
  ○ Appropriate dress
  ○ Use of mobile phones/social media in relation to customer confidentiality
  ○ Team work
  ○ Importance of providing a caring approach to customer care

T Level: Healthcare Science

Occupational Specialism: Assisting with Healthcare Science

Role Profile [INDICATIVE EXAMPLE]

Role Title	**Working Pattern**	To be agreed between the provider and employer
Assisting with Healthcare Science Trainee	**Duration**	315 hours
Objective(s)		
To support the healthcare science team by undertaking routine technical and scientific procedures to provide quality patient care in order to promote health and wellbeing		
Typical Activities (these are examples only; individual employs should customise these as appropriate)		
1. Support the healthcare science team, on a regular basis (at least twice a week), in the collection of clinical measurements such as: • blood pressure monitoring, • ECG recording, • oxygen saturation • peak flow 2. Work under supervision to receive, handle and store patient samples for processing and subsequent disposal 3. Support the healthcare science team, on a regular basis (at least twice a week), in the processing of patient specimens using appropriate techniques following Standard Operating Procedures including appropriate infection prevention control measures and all Health and Safety requirements		
Learning goals		**TQ Reference**
On the placement the student will need to further develop and hone through activity 1: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal		*[Insert corresponding reference from the TQ content]*

• Assessing a situation or a process for potential adverse effects. **Technical skills and understanding** • Skills to be able to select appropriate equipment and/or devices for the clinical measurement to be taken • Application of understanding of the underpinning principles of how equipment and devices allow accurate clinical measurements and images to be obtained • Skills in the calibration of equipment that is within Scope of Practice, for example calibrating pulse oximetry meters for checking O2 saturation • Skills in providing a caring approach to patient care when supporting the undertaking of clinical measurements • Application of professional practice requirements, including appropriate conduct in the healthcare environment, appropriate dress and punctuality On the placement the student will need to further develop and hone through activity 2: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing a situation or a process for potential adverse effects • Recording: transcribing, noting, capturing, saving and storing information **Technical skills and understanding** • Skills to check the suitability and quality of all patient samples received, always adhering to all sector and local guidelines • Skills in using IT systems to record details of samples received • Skills in determining if samples received are of a sufficient quality to permit processing and following procedures if samples are deemed not suitable, for example if samples are leaking they should be discharged and disposed of appropriately in line with Health and Safety policies • Skills in handling all samples with care and respect • Application of understanding of storage requirements for samples • Skills in the appropriate disposal of all specimens and tissue samples in line with Health and Safety policies and ethical regulations	

• Application of professional practice requirements, including appropriate conduct in the healthcare environment, appropriate dress and punctuality On the placement the student will need to further develop and hone through activity 3: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing a situation or a process for potential adverse effects • Investigating: designing and carrying out tests and interrogating data **Technical skills and understanding** • Application of understanding of the underlying principles of techniques used in the processing of samples, to ensure that samples are processed effectively to obtain the most accurate results possible. • Skills in carrying out specimen processing using appropriate techniques, following Standard Operating Procedures and all required legislation and guidelines • Skills in using a range of routine laboratory equipment to process patient specimens • Skills in the calibration of equipment in line with manufacturers requirements • Skills in maintaining equipment to ensure it is fit for use and safe to use in line with manufacturer's guidelines • Application of professional practice requirements, including appropriate conduct in the healthcare environment, appropriate dress and punctuality	
Minimum starting requirements	
• Attendance at induction day at the employer's premises • Health and Safety Training (Mandatory) provided by the employer • Any required inoculations, or supply/fitting of PPE as determined by the employer	
Required prior learning	
• Knowledge of all relevant Health and Safety regulations, legislation, local and national policies and standards in Healthcare Science • Knowledge of infection prevention and control in clinical healthcare settings	

- Knowledge of human anatomy and physiology in relation to the collection of clinical measurements
- Knowledge of normal physiological measurement values, taking into consideration factors such as age or gender
- Understanding of the scientific principles of how equipment and devices allow physiological measurements to be taken
- Skills in carrying out physiological measurements
- Knowledge of duty of care procedures
- Knowledge of how to determine the suitability of specimens for processing
- Knowledge of the storage and disposal requirements for specimens and tissue samples
- Knowledge of sample processing techniques and equipment used
- Skills in using routine laboratory equipment to undertake specimen processing using appropriate techniques
- Knowledge of the importance of adhering to GLP and SOPs when undertaking sample processing
- Typical workplace behaviours needed for role, including:
    - Punctuality
    - Appropriate dress
    - Use of mobile phones/social media in relation to patient confidentiality
    - Team work
    - Importance of providing a caring approach to patient care

T Level: Science
Occupational Specialism: Technical - Food Sciences

Role Profile [INDICATIVE EXAMPLE]

<table>
<tr><td>Role Title</td><td>Working Pattern</td><td>To be agreed between the provider and employer</td></tr>
<tr><td>Technical Food Sciences Trainee</td><td>Duration</td><td>315 hours</td></tr>
<tr><td colspan="3">Objective(s)</td></tr>
<tr><td colspan="3">Work within a food science environment, providing support to ensure all food products are safe to eat and of consistent quality (appearance, taste, and texture)</td></tr>
<tr><td colspan="3">Typical Activities (these are examples only; individual employers should customise these as appropriate)</td></tr>
<tr><td colspan="3">1. On a regular basis assist with the collection, interpretation and analysis of food product data to track production trends

2. Assist with the sampling of a food environment and subsequent identification of any pathogens present to ensure food safety

3. Under supervision, plan and carry out at least one sustainability analysis for a new food product, taking into consideration: raw materials, packaging, reuse of waste, energy usage and transportation costs

4. Under supervision, plan and carry out at least one taste panel; evaluate the results and make recommendations for product improvement</td></tr>
<tr><td colspan="2">Learning goals</td><td>TQ Reference</td></tr>
<tr><td colspan="2">On the placement, the student will need to further develop and hone through activity 1:

Employability skills
• Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone
• Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal
• Recording: transcribing, noting, capturing, saving and storing food product data
• Presenting: Conveying information to an audience to stimulate discussion, and/or secure consistent understanding</td><td>[Insert corresponding reference from the TQ content]</td></tr>
</table>

Technical skills and understanding • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional food science environment, always following this code of conduct, including appropriate dress and punctuality • Understanding of the legislation and regulations that apply to the food and drink industry including understanding of food safety and Health and Safety and environmental legislation • Understanding of the use and purposes of food industry standards (e.g. British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications) • Understanding of the UK end-to-end food supply chain, its sustainability and vulnerabilities and food fraud including Threats Analysis (TACCP) risk assessment procedure of existing suppliers • Understanding of health and safety in the Food Science environment, as well as occupationally health and safety specific understanding related to the food industry including manual handling, safe use of equipment, Standard Operating Procedures and Personal Protective Equipment • Skills in working safely within a food science environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures when carrying out food science activities • Understanding of food production data, how this is collected, interpreted and analysed • Understanding of how ICT and MIS are used to obtain food production data and support the analysis of data • Skills in creating a spreadsheet and inputting management data to track production trends • Skills in presenting information about production trends in written and visual format and/or presentations • Application of professional practice requirements, including required use of PPE and restrictions on use of mobile phones On the placement, the student will need to further develop and hone through activity 2: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone	

• Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional food science environment, always following this code of conduct, including appropriate dress and punctuality • Understanding of the legislation and regulations that apply to the food and drink industry including understanding of food safety and Health and Safety and environmental legislation • Understanding of the use and purposes of food industry standards (e.g. British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications) • Understanding of the UK end-to-end food supply chain, its sustainability and vulnerabilities and food fraud including Threats Analysis (TACCP) risk assessment procedure of existing suppliers • Understanding of health and safety in the Food Science environment, as well as occupationally health and safety specific understanding related to the food industry including manual handling, safe use of equipment, Standard Operating Procedures and Personal Protective Equipment • Skills in working safely within a food science environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures when carrying out food science activities • Understanding of microbiology, including awareness of pathogens and resulting toxins which cause food borne illness, how to sample an environment for contamination and how to use laboratory skills and equipment to identify any pathogens present • Skills in taking samples from specified food surface areas in order to identify any pathogens present • Skills in laboratory processes and use of equipment to identify pathogens • Skills in identifying hygiene process failures and making recommendations for system improvements • Application of professional practice requirements, including required use of PPE and restrictions on use of mobile phones.	

On the placement, the student will need to further develop and hone through activity 3: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation or a process for potential adverse effects **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional food science environment, always following this code of conduct, including appropriate dress and punctuality • Understanding of the legislation and regulations that apply to the food and drink industry including understanding of food safety and Health and Safety and environmental legislation • Understanding of the use and purposes of food industry standards (e.g. British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications) • Understanding of the UK end-to-end food supply chain, its sustainability and vulnerabilities and food fraud including Threats Analysis (TACCP) risk assessment procedure of existing suppliers • Understanding of health and safety in the Food Science environment, as well as occupationally health and safety specific understanding related to the food industry including manual handling, safe use of equipment, Standard Operating Procedures and Personal Protective Equipment • Understanding of the importance of sustainability within the food industry • Skills in carrying out a sustainability analysis on a new food product • Application of professional practice requirements, including required use of PPE and restrictions on use of mobile phones On the placement, the student will need to further develop and hone through activity 4: **Employability skills**	

• Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional food science environment, always following this code of conduct, including appropriate dress and punctuality • Understanding of the legislation and regulations that apply to the food and drink industry including understanding of food safety and Health and Safety and environmental legislation • Understanding of the use and purposes of food industry standards (e.g. British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications) • Understanding of the UK end-to-end food supply chain, its sustainability and vulnerabilities and food fraud including Threats Analysis (TACCP) risk assessment procedure of existing suppliers • Understanding of health and safety in the Food Science environment, as well as occupationally health and safety specific understanding related to the food industry including manual handling, safe use of equipment, Standard Operating Procedures and Personal Protective Equipment • Skills in working safely within a food science environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures when carrying out food science activities • Understanding of testing and evaluation methods used within the food science industry including taste panels • Understanding of the principals of sensory evaluation in food operations how to carry out a sensory analysis • Skills in carrying out a taste panel and evaluating the results • Application of professional practice requirements, including required use of PPE and restricted use of mobile phones	

Minimum starting requirements

- Attendance at induction day at the employer's premises
- Health and Safety Training (Mandatory)

Required prior learning

- Knowledge of the legislation and regulations that apply to the food and drink industry including understanding of food safety and Health and Safety and environmental legislation
- Knowledge of the use and purposes of food industry standards (e.g. British Retail Consortium, Standard Operating Processes, Quality Management Systems and internal and external specifications)
- Knowledge of the UK end-to-end food supply chain, its sustainability and vulnerabilities and food fraud including Threats Analysis (TACCP) risk assessment procedure of existing suppliers
- Knowledge of health and safety in the Food Science environment, as well as occupationally health and safety specific knowledge related to the food industry including manual handling, safe use of equipment, Standard Operating Procedures and Personal Protective Equipment
- Knowledge of microbiology including awareness of pathogens and resulting toxins which cause food borne illness, how to sample an environment for contamination and how to use laboratory skills and equipment to identify any pathogens present
- Skills in taking samples in a simulated food environment in order to identify any pathogens present
- Skills in laboratory processes and use of equipment to identify pathogens
- Knowledge of the importance of sustainability within the food industry
- Skills in carrying out a sustainability analysis on a simulated new food product
- Knowledge of testing and evaluation methods used within the food science industry including taste panels
- Knowledge of the principals of sensory evaluation in food operations how to carry out a sensory analysis
- Skills in carrying out a taste panel and evaluating the results in a simulated environment
- Skills in creating a spreadsheet and inputting simulated food management data to track production trends
- Skills in presenting information about simulated food production trends in written and visual format and/or presentations
- Typical workplace behaviours needed for role, including:
    - Punctuality
    - Appropriate dress and use of required PPE
    - Use of mobile phones/social media in relation to confidentiality of food production data
    - Teamwork
    - Importance of safety, regulations and need to work in an ethical way at all times

T Level: Science

Occupational Specialism: Technical - Metrology Sciences

Role Profile [INDICATIVE EXAMPLE]

Role Title	**Working Pattern**	To be agreed between the provider and employer
Technical Metrology Sciences Trainee	**Duration**	315 hours
Objective(s)		
Work within a metrology sciences team performing scientific measurement tasks to meet customer requirements by producing results that meet customer brief and ensure accuracy		
Typical Activities (these are examples only; individual employers should customise these as appropriate)		
1. Under supervision, plan appropriate scientific measurements which comply with all required regulatory requirements 2. Under supervision, carry out a range of measurement tasks to ensure accuracy, following all regulatory requirements and Health and Safety requirements 3. Under supervision, identify and resolve issues with measurement tools and equipment within a scientific metrology environment		

Learning goals	**TQ Reference**
On the placement the student will need to further develop and hone through activity 1: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects. • Planning: identifying discrete steps, estimating time and resources, prioritising, coordinating, sequencing activity	*[Insert corresponding reference from the TQ content]*

Technical skills and understanding • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific metrology environment, always following this code of conduct, including appropriate dress and punctuality. • Understanding of all health and safety requirements that relate to technical metrology sciences and the correct use of Personal Protective equipment • Skills in adhering to all health and safety requirements • Understanding of the national and international regulations and standards relating to metrology • Understanding of the fundamentals of metrology including the context in which scientific measurements are taken and the sources of uncertainty in scientific measurement • Understanding of the terminology and units used in metrology • Skills in identifying measurement needs • Understanding of the operating principles, tools and equipment used in metrology • Understanding of measurement systems • Understanding of different sample preparation methods • Understanding customer requirements, such as tolerance, timescales and costs • Skills in extracting customer requirements from a customer brief • Skills in planning the measurement process taking account of measurement process, cost tolerance and timescales • Skills in the design of a measurement; taking-into account all sources of uncertainty • Skills in reading and applying a simple uncertainty budget • Skills in using different unit systems and being able to convert between units • Skills in using the correct terminology for scientific measurement in metrology • Skills in identifying and planning the most appropriate tools, equipment, instrumentation and software programs to use • Skills in selecting the most appropriate measurement system to plan a measurement task • Skills in identifying the preparation techniques that will be needed on the item to be measured • Skills in accessing and using information and documentation to confirm measurement requirements • Skills in creating a measurement plan with all relevant information	

On the placement the student will need to further develop and hone through activity 2: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects • Recording: transcribing, noting, capturing, saving and storing scientific data and information • Physical dexterity: when handling items to be measured and using tools and equipment - precise and controlled movements, agility, coordination, delicacy, appropriate application of force **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific metrology environment, always following this code of conduct, including appropriate dress and punctuality. • Understanding of all health and safety requirements that relate to technical metrology sciences and the correct use of Personal Protective equipment • Skills in adhering to all health and safety requirements • Understanding of the national and international regulations and standards relating to metrology • Understanding of the fundamentals of metrology including the context in which scientific measurements are taken and the sources of uncertainty in scientific measurement • Understanding of the terminology and units used in metrology • Understanding of the operating principles, tools and equipment used in metrology • Understanding of measurement systems • Understanding of different sample preparation methods • Understanding customer requirements, such as tolerance, timescales and costs • Understanding of validation and verification techniques of measuring instruments • Skills in preparing the work environment in order to perform measurement tasks • Skills in setting up the measurement system and preparing the item to be measured	

• Skills in preparing the correct standard for the measurement • Skills in calibration of equipment • Skills in undertaking a measurement task using a developed plan, making use of appropriate equipment • Understanding of how to retrieve and record measurement results • Skills in collecting data, including assessing repeatability and reproducibility of results On the placement the student will need to further develop and hone through activity 3: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects • Solving problems: applying a logical approach to identifying issues and proposing solutions to affect a repair **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific metrology environment, always following this code of conduct, including appropriate dress and punctuality. • Understanding of all health and safety requirements that relate to technical metrology sciences and the correct use of Personal Protective equipment • Skills in adhering to all health and safety requirements • Understanding of the national and international regulations and standards relating to metrology • Understanding of the fundamentals of metrology including the context in which scientific measurements are taken and the sources of uncertainty in scientific measurement • Understanding of the terminology and units used in metrology • Skills in identifying measurement needs • Understanding of the operating principles, tools and equipment used in metrology • Understanding of how to carry out basic repairs on measurement systems, tools and equipment • Skills in using problem solving techniques to identify and resolve issues with metrology tools and equipment	

• Skills in carrying out basic repairs on measurement systems, tools and equipment	

Minimum starting requirements

- Attendance at induction day at the employer's premises
- Health and Safety Training (Mandatory)

Required prior learning

- Employability skills and behaviours including appropriate conduct in the professional scientific metrology environment, appropriate dress and punctuality
- Knowledge of the importance of working safely and ethically, following all relevant legislation, regulations and Health and Safety requirements
- Knowledge of the health, safety and environmental practices in Science that relate to Technical: Metrology Sciences when performing any activities, this includes knowledge of all legislation and regulations, use of Personal Protective Equipment (PPE), and completing risk assessments
- Knowledge of the reasons for and requirement to work under highly regulated conditions to control quality and safety in the metrology environment
- Skills in working safely, complying with relevant legislation and assessing risks and hazards, including the writing of risk assessments in a simulated metrology laboratory environment
- Knowledge of the fundamentals of metrology, including context, sources of uncertainty and terminology used
- Skills in identifying measurement needs in a simulated environment
- Skills in using the correct terminology
- Knowledge of the most common operating principles used for measurement
- Knowledge of the equipment, tools and software programs used within each operating principle
- Skills in selecting appropriate tools, equipment, instrumentation and software programs for measurement tasks
- Skills in undertaking measurement tasks in a simulated environment
- Knowledge of measurement systems
- Knowledge of how to prepare items to be measured
- Knowledge of measurement plans
- Skills in creating a measurement plan
- Skills in performing measurement tasks to meet a client brief
- Skills in carrying out repairs on measurement systems, tools and equipment
- Typical workplace behaviours needed for role, including:
    - Punctuality
    - Appropriate dress and use of required PPE
    - Use of mobile phones/social media in relation to confidentiality of data/information/results
    - Teamwork
    - Importance of safety, regulations and need to work in an ethical way at all times

T Level: Science

Occupational Specialism: Technical - Laboratory Sciences

Role Profile [INDICATIVE EXAMPLE]

Role Title	**Working Pattern**	To be agreed between the provider and employer
Technical Laboratory Sciences Trainee	**Duration**	315 hours
Objective(s)		
Work within a scientific team to provide routine testing and technical support within a scientific laboratory environment in order to deliver a high quality and efficient service to clients		
Typical Activities		
1. Under supervision, carry out practical scientific techniques (at least twice weekly) to measure a range of physical properties, such as: polarity, temperature, pressure, conductivity and radioactivity, following Standard Operating Procedures, regulatory requirements and all Health and Safety requirements 2. Under supervision, carry out a range of laboratory techniques (at least twice weekly) to identify, separate and analyse substances, following Standard Operating Procedures, regulatory requirements and all Health and Safety requirements 3. Under supervision, manage equipment within a scientific laboratory environment, through maintenance, cleaning and calibration using appropriate techniques following Standard Operating Procedures, regulatory requirements and all Health and Safety requirements		
Learning goals		**TQ Reference**
On the placement, the student will need to further develop and hone through activity 1: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal		*[Insert corresponding reference from the TQ content]*

• Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects • Recording: transcribing, noting, capturing, saving and storing scientific data and information **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific laboratory environment, always following this code of conduct, including appropriate dress and punctuality • Skills in effective planning • Understanding of regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in comply with regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in working safely within a scientific laboratory environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures and/or scientific papers when carrying out scientific techniques • Skills in using appropriate SI units and converting between measurement units if required when undertaking scientific techniques to measure a range of physical properties • Skills in undertaking practical scientific techniques to measure a range of physical properties • Knowledge of data handling and recording, interpreting and analysing data and importance of data integrity • Skills in data handling and recording, interpreting and analysing data • Skills in producing reliable and verifiable data from undertaking scientific techniques to measure a range of physical properties On the placement, the student will need to further develop and hone through activity 2: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal	

• Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects • Recording: transcribing, noting, capturing, saving and storing scientific data and information **Technical skills and understanding** • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific laboratory environment, always following this code of conduct, including appropriate dress and punctuality. • Understanding of regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in comply with regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in working safely within a scientific laboratory environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures and/or scientific papers when carrying out scientific techniques • Skills in using appropriate SI units and converting between measurement units if required when undertaking scientific techniques • Skills in undertaking a range of laboratory techniques to identify, separate and analyse substances • Skills in producing reliable and verifiable data from undertaking scientific techniques to identify, separate and analyse substances On the placement, the student will need to further develop and hone through activity 3: **Employability skills** • Communicating: active listening, use of visual, oral and written methods, engaging with individuals, sharing, building rapport, adapting style and tone • Working in a team: Working with others with different skills, expertise and experience to accomplish a task or goal • Assessing risks: Assessing a situation, a proposal, a product or process for potential adverse effects • Recording: transcribing, noting, capturing, saving and storing scientific data and information • Solving problems: applying a logical approach to identifying issues and proposing solutions to affect a repair	

Technical skills and understanding • Skills and behaviours that demonstrate application of professional practice, including appropriate conduct in the professional scientific laboratory environment, always following this code of conduct, including appropriate dress and punctuality. • Understanding of regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in comply with regulations appropriate to the sector/ industry and the specific working environment for the placement • Skills in working safely within a scientific laboratory environment; complying with all relevant legislation and regulations in handling and disposing of materials, assessing hazards and risks and using appropriate Personal Protective Equipment (PPE) • Skills in following Standard Operating Procedures and/or scientific papers when managing and maintaining equipment • Skills in the setting up and calibrating scientific equipment within a scientific laboratory setting • Skills in carrying out and recording routine maintenance and cleaning of scientific equipment • Skills in recognising when scientific equipment is producing inaccurate results • Skills in recognising when scientific equipment is damaged or unsafe to use	
Minimum starting requirements	
• Attendance at induction day at the employer's premises • Health and Safety Training (Mandatory)	
Required prior learning	
• Employability skills and behaviours including appropriate conduct in the professional scientific laboratory environment, appropriate dress and punctuality • Knowledge of the importance of working safely and ethically, following all relevant legislation, regulations and Health and Safety requirements • Knowledge of the health, safety and environmental practices in Science that relate to Technical: Laboratory Sciences when performing scientific techniques, this includes knowledge of all legislation and regulations, use of Personal Protective Equipment (PPE), and completing risk assessments • Knowledge of the reasons for and requirement to work under highly regulated conditions to control quality and safety	

- Skills in working safely, complying with relevant legislation and assessing risks and hazards, including the writing of risk assessments in a simulated laboratory environment
- Knowledge of laboratory techniques to identify, separate and analyse substances
- Knowledge of laboratory techniques used to measure physical properties
- Knowledge of the scientific principles of laboratory techniques such as separation techniques and techniques to measure physical properties and how this relates to core scientific knowledge such as atomic structure, molecular structure and bonding, materials science etc.
- Skills in carrying out laboratory techniques to identify, separate and analyse substances
- Skills in carrying out laboratory techniques to measure physical properties
- Skills in using appropriate SI units and work with a range of appropriate scales when conducting scientific tasks and be able to convert between measurement units when required
- Knowledge of the importance of appropriate maintenance and cleaning of scientific equipment
- Skills in carrying out appropriate maintenance and cleaning of scientific equipment
- Knowledge of how to set up and calibrate scientific equipment
- Skills in setting up and calibrating scientific equipment
- Typical workplace behaviours needed for role, including:
    - Punctuality
    - Appropriate dress and use of required PPE
    - Use of mobile phones/social media in relation to confidentiality of data/information/results
    - Team work
    - Importance of safety, regulations and need to work in an ethical way at all times