



# Improvement Technician Apprenticeship Standard – Level 3



Improvement Technicians are responsible for delivery and coaching of improvement activity within an area of responsibility, often associated with Lean and Six Sigma methodologies. They can be found across all industry sectors and functions including automotive, banking, engineering, food products, IT, property, retail, telecoms etc.

Typically, Technicians work as a member of an operational team to resolve problems - preventing re-occurrence, engaging others in issues affecting them and to support the improvement of performance.

## How will Apprentices learn?

Our Personal Training Advisors will deliver high-quality face-to-face teaching and learning at the employer's premises. They will provide all the resources your Apprentices will need to progress.

Our intuitive learner management system, OneFile will really bring the subject to life through our online resources. We provide real-time learner information so that you will always know what is being taught and how learners are progressing.

## What will Apprentices learn?

This Apprenticeship has been designed to develop existing and new skills and to equip Apprentices with the knowledge, skills and behaviours required to support them in their role.

Our Apprenticeships provide highly effective teaching and learning tailored to meet individual business needs and to provide job-specific skills vital for peak business performance.

The Improvement Practitioner apprenticeship requires the development of following professional behaviours, knowledge and skills. Some are detailed below;

- Project management
- Data acquisition and scope
- Root cause analysis
- Compliance
- Team working

## Duration

The minimum timeframe for this qualification is 12 months. End Point Assessment will follow teaching and learning period and is estimated to take 3 months.

## Maths and English functional skills

Apprentices will be required to have or achieve level two English and Maths.

## Off the job (OJT)

The apprentice must receive off-the-job training for a minimum of 20% of the time that they are paid to work.

There are many activities that can be calculated towards the OJT hours such as;

- Shadowing a colleague
- Online learning
- Internal training
- Team Meetings
- Appraisal/1-2-1 visits

The full criteria can be found by visiting Institute for Apprenticeships website below;

[institute-for-apprenticeships.org/apprenticeshipstandards/improvement-practitioner/](https://institute-for-apprenticeships.org/apprenticeshipstandards/improvement-practitioner/)



# Improvement Technician Knowledge, Skills & Behaviours - Level 3



## Improvement Practitioners have the Knowledge and understanding of:

- Compliance: Legislative and customer compliance requirements including health and safety
- Team formation & leadership: Improvement team roles and responsibilities in a change environment
- Self-development: Different sources for knowledge development
- Project management: Project charter, Gantt chart, reporting documentation, Red Amber Green (RAG) status, communication (verbal and non-verbal channels) and implementation plans
- Change management: Roles of the manager and leader within change. Influencing, reinforcement and coaching principles
- Principles & methods: Six Sigma principles per ISO13053 (International Organisation for Standardisation), interim containment actions, Lean principles
- Project selection & scope: Selection matrix, scoping tree
- Problem definition: Exploratory data analysis, data collection planning, problem and goal statements
- Process mapping & analysis: Supplier Input Process Output Customer (SIPOC), process mapping, value and waste analysis, performance metrics - discrete data
- Data acquisition for analysis: Data stratification, sampling theory, data types, variation types and sources, data collection tools, operational definition and principles of measurement error
- Basic statistics & measures: Control charts - discrete data
- Process capability & performance: Capability analysis - continuous data
- Root cause analysis: Histograms
- Experimentation: Active analysis versus one factor at a time, Plan Do Check Act
- Identification & prioritisation: Brainstorming, selection criteria
- Sustainability & control: Process

## Improvement Practitioners have the Skills within the context of their own organisation to:

- Compliance: Work in accordance with organisational controls and statutory regulations
- Communication: Share improvement progress through appropriate reporting
- Project management: Plan, manage and implement improvement activities. Identify and support management of risks. Develop the business case for improvement activity and implementation
- Change management: Engage through communications. Reinforce – positively and negatively. Effectively coach peers
- Principles and methods: Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits
- Project selection and Scoping: Identify and scope improvement projects and establish clear measurable objectives
- Problem definition: Develop a problem/opportunity statement supported by validated data
- Voice of the customer: Apply techniques to identify customers, their requirements and translate these to metrics



## Improvement Technician Knowledge, Skills & Behaviours - Level 3



### Improvement Practitioners have the Skills within the context of their own organisation to:

- Process mapping & analysis: Apply process mapping tools to visualise processes, analyse process performance establishing key insights for performance improvement
- Lean tools: Apply techniques such as identification and removal of 8 wastes, 5S (Sort, Shine, Set, Standardise, Sustain), standard work, kaizen, visual displays and controls, error proofing, preventative maintenance
- Data acquisition for analysis: Develop data collection plan and validated measurement processes to understand performance
- Basic statistics & measures: Establish patterns and trends in data over time using tally, pie, run/trend and pareto charts
- Data analysis-statistical methods: Identify common and special cause variation
- Process capability & performance: Analyse product/process performance using good quality data
- Root cause analysis: Use cause and effect diagrams, technique of 5 whys and graphical analysis to understand and verify root causes
- Identification & prioritisation: Identify and prioritise improvement solutions
- Benchmarking: Recognise the value of sharing best practice
- Sustainability & control: Create control and reaction plans with detection measures, identify opportunities to embed changes to leverage benefit to the business.

### Improvement Practitioners demonstrate the following Behaviours:

- Drive for results: Clear commitment for identifying opportunities and delivering improvements, pays attention to detail
- Team-working: Helps when asked, works effectively in a diverse team, considers impact of own actions on others, motivates peers
- Professionalism: Acts in a moral, legal and socially appropriate manner, aligns behaviours to the organisations values, trusted to working on own when appropriate
- Continuous development: Acts upon feedback, reflects on performance and has a desire for learning
- Safe working: Ensures safety of self and others, challenges safety



# Improvement Technician End Point Assessment – Level 3



The end point assessment will only commence once the Employer, Apprentice and Smart Training Advisor are confident that the apprentice has developed all the knowledge, skills and behaviours defined in the apprenticeship standard and that these are clearly evidenced through the progress review meetings and records. The independent end point assessment ensures that all Apprentices consistently achieve the industry set professional standard. The EPA can commence at any point once the apprentice is competent and after the twelve-month minimum period of learning and development. Prior to independent end point assessment the functional skills English and maths components of the apprenticeship must be successfully completed.

### What does the EPA comprise for this apprenticeship?

Multiple choice examination	Project report, presentation and questioning	Professional discussion
This is to assess the knowledge elements of the standard.	This is to holistically assess KSBs across the standard –based on the apprentice’s improvement project(s) as contained in the project portfolio	This is underpinned by the apprentice’s log, to holistically assess KSBs across the standard
<b>Completion</b>		
<p>The Independent end point assessor confirms that each assessment element has been completed.</p> <p>The Apprenticeship includes both Pass and Distinction grades with the final grade based on the Apprentice’s combined performance in each assessment activity.</p> <p>In order to pass the Apprenticeship it is necessary to pass each of the assessment areas. Should an Apprentice be unsuccessful in passing one assessment activity this can be retaken as soon as the apprentice is ready and when practicable for the business.</p> <p>Should they be unsuccessful on two or more of the assessments a period of further training and development lasting between one and three months must take place before a resit. For more information on grading criteria please refer to the Apprenticeship standard assessment plan by searching via <a href="https://findapprenticeshiptraining.esfa.bis.gov.uk/">https://findapprenticeshiptraining.esfa.bis.gov.uk/</a></p>		