## **Improvement Technician Apprenticeship 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 banking, engineering, IT, retail, 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. Job titles include, but are not limited to: Business Improvement Co-ordinator, Continuous Improvement Executive, Process Technician and Quality Control Analyst.

The knowledge, skills and behaviours that the learner will develop as part of this progamme are detailed below.

Knowledge				
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	D ata 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.			



Skills				
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 & Methods	Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits.			
Project Selection & 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.			
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, 55 (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.			



Behaviours/Attitudes			
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.		

Once the programme of learning is complete and the learner, employer and Intec agree the necessary **Knowledge**, **Skills** and **Behaviours/Attitudes** have been met, learners will be put forward to the **Assessment Gateway** and this will trigger the **End Point Assessment**. This Assessment will be carried out with an independent body to ensure the Apprentice can demonstrate they have achieved the required standard.

Assessment Method	Weighting	Merit	Distinction
Multiple Choice Examination	10%	50 - 79%	80% +
Project Report, Presentation & Q&A	60%	50 - 79%	80% +
Professional Discussion underpinned by Log	30%	50 - 79%	80% +

**Duration:** The Apprenticeship will take a minimum of 14-18 months to complete. Plus an additional 3 months to complete the End Point Assessment.

**Entry Requirements:** Apprentices will be required to have or achieve level 2 English and maths tests prior to completion of their Apprenticeship.





