

## IMPROVEMENT TECHNICIAN

COURSE DURATION | 14 MONTHS

L3

APPRENTICESHIP STANDARD

# Responsible for delivery and coaching of improvement activity within an area of responsibility.

#### Course Overview

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.

#### Typical responsibilities for an improvement technician are:

- Engaging team members in the identification of improvement opportunities and relevant countermeasures and controls
- Initiating and facilitating improvement activities through to confirmed resolution
- Providing local expertise in business improvement methods and basic tools to team

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**.

There are a **variety of job titles associated with the occupation**, these include, but are not limited to: Business Improvement Co-ordinator, Continuous Improvement Executive, Process Technician, Operational Excellence/Lean Engineer, Lean Six Sigma Yellow belt and Quality Control Analyst.











#### **IMPROVEMENT TECHNICIAN**

## **COURSE CONTENT**

### 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: 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

#### Skills

- Communication: Share improvement progress through appropriate reporting
- Voice of the customer: Apply techniques to identify customers, their requirements and translate these
  to metrics
- 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 analysis-statistical methods: Identify common and special cause variation
- Benchmarking: Recognise the value of sharing best practice

#### 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