

BUSINESS IMPROVEMENT TECHNIQUES

As its name suggests **BUSINESS IMPROVEMENT TECHNIQUES** is a qualification that should provide a good return on investment. The qualification is available as both a National Vocational Qualification (NVQ) at levels 2, 3 and 4 and as a taught Vocationally Related Qualification (VRQ) at level 2. The VRQ provides an excellent platform for six-sigma training.

The National Vocational Qualification (NVQ) is available at levels 2, 3 and 4. The level 2 qualification is aimed at the shop floor or office staff level, where the introduction and adoption of simple but powerful techniques such as 5S and Kaizen can have a dramatic effect on the continuing performance of an organisation.

A team will provide your employees with all the knowledge and skills necessary to make a sustained improvement to the organisation's performance.

In order to achieve the NVQ qualification in Business Improvement Techniques, each candidate must be involved in a project or activity that generates a real business improvement result. The candidates will be required to collect evidence of their activities and submit this as a portfolio for review.

There are two NVQ BIT pathways: process and quality. The structure of each is illustrated in the table on the next page: -

Business Improvement Techniques NVQ level 2		
	Process pathway	Quality pathway
Mandatory units	<ul style="list-style-type: none"> • Complying with statutory regulations and organisational safety requirements 	<ul style="list-style-type: none"> • Complying with statutory regulations and organisational safety requirements
	<ul style="list-style-type: none"> • Contributing to effective team working 	<ul style="list-style-type: none"> • Contributing to effective team working
	<ul style="list-style-type: none"> • Applying 5S 	<ul style="list-style-type: none"> • Applying 5S
	<ul style="list-style-type: none"> • Applying continuous improvement techniques (Kaizen) 	<ul style="list-style-type: none"> • Applying continuous improvement techniques (Kaizen)
	<ul style="list-style-type: none"> • Visual management systems 	<ul style="list-style-type: none"> • Applying 6 sigma methodology to a project
Select 1 optional unit	<ul style="list-style-type: none"> • Statistical process control (SPC) 	<ul style="list-style-type: none"> • Statistical process control (SPC)
	<ul style="list-style-type: none"> • Failure mode and effects analysis (FMEA) 	<ul style="list-style-type: none"> • Failure mode and effects analysis (FMEA)
	<ul style="list-style-type: none"> • Mistake proofing (Poke Yoke) 	<ul style="list-style-type: none"> • Mistake proofing (Poke Yoke)
	<ul style="list-style-type: none"> • Analysing and selecting parts for improvement 	
	<ul style="list-style-type: none"> • Creating standard operations procedures. 	
	<ul style="list-style-type: none"> • Lead time analysis 	
	<ul style="list-style-type: none"> • Set up reduction techniques (SMED) 	
	<ul style="list-style-type: none"> • Total productive maintenance (TPM) 	
	<ul style="list-style-type: none"> • Problem solving techniques 	
	<ul style="list-style-type: none"> • Flow process analysis 	

Complying with Statutory Regulations and Organisational Requirements

This is a mandatory unit for both the process and quality pathways. The unit covers the Health and Safety issues that everyone in an organisation needs to know.

Contributing to Effective Teamwork

It is a well-recognised fact that effective teams provide outcomes greater than the sum of their parts. Business Improvement Techniques requires everyone in the organisation to work together so that improvements in quality, productivity and safety can be realised.

Applying 5S

This unit looks at five inter-related activities, which were developed by Hiroyuki Hirano in his famous book, 'Five Pillars of the Visual Workplace'. The five pillars are defined as **S**ort, **S**et in Order, **S**hine, **S**tandardise, and **S**ustain. Hence the term 5S. When properly implemented and maintained 5S provides the framework for significant improvements in quality, safety, inventories, delivery times and productivity. It forms the foundations for all improvements within an organisation.

Applying Continuous Improvement Techniques (Kaizen)

The term Kaizen is derived from two, Japanese words; 'Kai' which means to take apart and 'Zen', which mean's good. Kaizen involves taking apart a process or service and making it better. It is both a philosophy and a set of techniques aimed at eliminating waste and adding value to everything that is done. It involves small, incremental improvements over a long period that realises major business improvements.

Set-Up Reduction Techniques

This unit is concerned with achieving equipment or product changeovers in record time. Based on the Single Minute Exchange of Dies (SMED) technique, which has been used by organisations such as Toyota to reduce the set-up time on a stamping press from 4 hours to 3 minutes.

Failure Mode and Effects Analysis (FMEA)

FMEA can be carried out on a product, process or service. It involves the systematic approach and analysis of what could potentially go wrong and classifying the effect in terms of severity, occurrence and detection. The objective of the technique is to find solutions, which will either eliminate or minimise the effect of any possible failures.

Total Productive Maintenance (TPM)

Total Productive Maintenance or TPM involves using equipment and machines in the most efficient way. This involves eliminating or reducing the 'six big losses', namely breakdowns, set-up and adjustment time, idling and minor stoppages, reduced speed of operations, defects and rework and start-up or yield losses. In addition the techniques aim to increase the operational life of the assets.

Mistake Proofing (Poke Yoke)

Developed by Dr Shigeo Shingo, (Zero Quality Control) the aim of Poke Yoke is to make each step of production or a process mistake free. There are two main steps; preventing the occurrence of a defect in the first place and secondly the detection of defects. It uses mistake-proofing devices to prevent errors from ever turning into defects.

Visual Management Systems

Visual Management Systems are a very powerful set of principles and techniques that have a profound effect on safety, quality and productivity.

Problem Solving Techniques

This unit covers a range of problem solving tools including root cause analysis. Aimed at creating permanent corrective actions that, will lead to reduced costs, improved quality as well as improved delivery times and responsiveness to customer demands

Analysing and Selecting Parts for Improvement

Selecting the most appropriate parts for improvement is very important. If you get the selection correct then the organisation can realise the best return on its activities.

Lead Time Analysis

Applying the principles and processes of lead time analysis to parts or processes with the objective of reducing the lead time by improving the supply or delivery of parts, work flow, quality, flexibility of the workforce and achieving inventory balance.

Flow Process Analysis

Flow process analysis is used to describe a process and then identify and establish all the elements of waste, problems or conditions where improvements can be made.

Basic Statistics

Statistics are a powerful tool for recording, identifying and analysing data, which may relate to either a process or a service. This unit introduces a range of tools and techniques, which will enable the correct interpretation of data to be made.

Statistical Process Control (SPC)

Statistical Process Control uses a range of statistical methods and tools to manage the output from a process. Primarily concerned with the central tendency of data, its dispersion and ensuring that a process remains in statistical control. It is a powerful tool for ensuring that the process is operating at its optimum in terms of meeting specifications.

Applying Six Sigma Methodology to a Project

Six Sigma consists of both a range of statistical based quality improvement techniques and philosophy based on the elimination of waste and improved performance as far as technically possible (3.4 defects per million parts or opportunities). The system was originally developed by Motorola in the 1980s. Since then a number of high profile organisations such as GE, Sony, Texas Instruments and Ford have all adopted the system and claimed remarkable results.

Six –sigma involves using proven quality principles and techniques and a small group of in-house technical leaders which are applied in a simple improvement model known as DMAIC; **D**efine, **M**easure, **A**nalyse, **I**mprove, and **C**ontrol.

Six Sigma -Process Mapping

Process mapping involves identifying the key stages that form the overall process under investigation. Value added and non-value added steps in the process are identified. From this map suggestions for process improvements can be determined.

Creating Standard Operating Procedures

The methods covered by this unit were first developed by the Toyota Motor Company in the late nineteen seventies. Standard operating procedures are used to ensure that any task is completed in the most effective and efficient manner.

Through the Train-to-Gain Scheme, the Business Improvement Techniques programme could be **free** of charge to your organisation. To be eligible, employees on the programme must not already hold a level 2 qualification. If your organisation employs less than 50 people then the wages for the time spent training could be reimbursed.

For further information please contact: -

We Teach You (UK) Ltd. (Marie Jenkins) on 08 700 800 800 or by email at M.Jenkins@weteachyou.co.uk