

Level 4 Improvement Practitioner (Green Belt) – Classroom Training

The modular training programme provides a comprehensive toolkit to target waste elimination, process flow and optimisation. Team-based problem solving approaches utilise the Lean Six Sigma methodology which is applied to workplace projects which are progressed in parallel with the training, and supported by coaching sessions.

Month 1 – 3: Provides core foundation skills for Improvement Practitioners [4 days training + 3 days coaching]

Module 1 (2 days) Launch Module – Introduction to Lean Six Sigma & the DMAIC Approach	Module 2 (1 day) Building the Foundations for CI –	Module 3 (1 day) Stakeholders & Change		
<p>This introductory module introduces the core principles of Lean Six Sigma and using a process simulation gives a practical introduction to the end to end DMAIC approach</p> <p>Outcome:- Enabling candidates to immediately be able to identify and implement 4-6 week small DMAIC improvement projects using DMAIC & A3 reporting</p> <p>Introduction to Lean Sigma approach</p> <ul style="list-style-type: none"> Roles and responsibilities Value add vs non-value add Identifying the 7 classic wastes Project selection criteria Introduction to A3 method for project management and reporting <p>Define: Setting the Foundations</p> <ul style="list-style-type: none"> Understanding the facts Forming a team Constructing problem statements Scoping the project Use of SIPOC mapping The Pareto principle Understanding customer expectations Setting the objective <p>Measure: Knowing the Facts</p> <ul style="list-style-type: none"> Role of process mapping Process flow & sequence charting Identifying and implementing quick wins Collecting and validating data <p>Analyse: Understanding the Root Cause</p> <ul style="list-style-type: none"> Identifying the possible causes of a problem Using cause & effect Drill down using 5 Why's Taking a data driven approach to verifying the causes <p>Improve: Making the Changes</p> <ul style="list-style-type: none"> Solution generation techniques Solution evaluation and selection Testing the solution Planning to implement changes <p>Control: Sustaining the Gains</p> <ul style="list-style-type: none"> The basics of control planning The role of standards Mistake Proofing Where else could the solution be used? <p>Next Steps Planning</p> <ul style="list-style-type: none"> Project planning Next steps summary 	<p>6 WEEK GAP Project Working Coaching (1 session)</p> <p><i>Delegates work individually or in small teams to identify and deliver a 'Yellow Belt' level improvement project using DMAIC</i></p> <p><i>This gives them foundation understanding of DMAIC, enables them to deliver early & immediate benefits to the company & also enables them to be able to participate as team members in larger BB level improvement projects if applicable.</i></p>	<p>1 day module providing hands on introduction to the Lean Foundation tools</p> <p>Outcome:- Assess and facilitate improvement of the workplace foundations</p> <p>Identifying Waste in Daily Work</p> <ul style="list-style-type: none"> Waste walking and the chalk circle <p>Workplace Organisation (5S)</p> <ul style="list-style-type: none"> How to achieve and sustain an organised workplace using the 5S approach <p>Standard Working</p> <ul style="list-style-type: none"> The importance of standards and their role in Lean implementation The difference between engineering standards and workplace standards A guide to writing and implementing standards in the workplace Process confirmation <p>Visual Management</p> <ul style="list-style-type: none"> Creating a visual workplace <p>Implementing the Lean Foundations</p> <ul style="list-style-type: none"> Engaging sponsor support Creating the 'Just Do It' culture and encouraging quick wins A3 reporting – DMAIC and PDCA 	<p>Part 1 of building the delegate's change management skills</p> <p>Outcome:- Build the delegates' skills in leading and coaching improvement activity</p> <p>Enablers for Project Success</p> <ul style="list-style-type: none"> Analysing enablers/barriers using force field analysis Building the business case <p>Securing Sponsorship</p> <ul style="list-style-type: none"> Identifying and engaging senior support Stakeholder analysis tools Influencing skills & dealing with initial resistance <p>Building and Managing an Improvement Team</p> <ul style="list-style-type: none"> Selecting the team and assigning roles Developing the project plan <p>Engaging the Team in CI</p> <ul style="list-style-type: none"> Assessing and improving workplace organisation Creating a visual workplace The role of standards and process compliance Encouraging everyday Kaizen 	<p>2 WEEK GAP Project Working Coaching (1 session)</p>

Month 4 – 6: Provides structured approach for defining and facilitating larger improvement projects [4 days training + 3 days coaching]

Module 4 (2 days) Identifying, Defining and Planning Improvement Projects	Module 5 (1 day) Facilitation Skills	Module 6 (1 day) Basic Statistics		
<p>This module provides the tools to use Value Stream Mapping to identify and Plan a programme of improvement activities</p> <p>Outcome:- This module will enable candidates to work individually or with small teams to map and analyse a Value Stream and define a programme of improvement activities</p> <p>Defining Larger Improvement Opportunities</p> <ul style="list-style-type: none"> The project charter Defining the project metrics Problem statements & SMART Objectives revisited Defining the project scope & the principle of Y = f(X) Understanding VOC – concept of CTQs <p>Baselining the Current State</p> <ul style="list-style-type: none"> Introduction to Value Stream Mapping (VSM) Mapping the current state Data collection for mapping activity <p>Analysing the Current State</p> <ul style="list-style-type: none"> Process analysis – identifying hotspots Analysing demand vs capacity; work balance; barriers to flow Introduction to assessing process stability and capability Assessing risk Prioritising process issues Getting to the root cause <p>Designing the Future State</p> <ul style="list-style-type: none"> Facilitating Future State Mapping activity Where are the biggest opportunities Identifying and implementing quick wins Creating the improvement plan 	<p>2-4 WEEK GAP Project Working Coaching (1 session)</p> <p><i>Delegates facilitate value stream mapping activity for defined value stream and create a project charter and improvement programme for what will be their main project focus for accreditation</i></p>	<p>Part 2 of building the delegate's change management skills</p> <p>Outcome:- This is core skills module focused on facilitation and coaching skills</p> <p>Leading & Developing Improvement Teams</p> <ul style="list-style-type: none"> Stages of improvement team development Developing performing teams through effective leadership <p>Facilitating for Maximum Results</p> <ul style="list-style-type: none"> Running effective meetings Managing conflict; dealing with difficult people & situations Adapting communications for groups 	<p>1 day module building core statistical skill and introducing Minitab</p> <p>Outcome: develops a foundation in statistics and use of Minitab</p> <p>Data Collection Planning</p> <ul style="list-style-type: none"> Key considerations for data collection An introduction to sampling techniques Using operational definitions <p>Statistical Concepts & Minitab</p> <ul style="list-style-type: none"> Describing data –measures of location, variation and shape Communicating statistics to a non-technical audience Introduction to Minitab software Visualising descriptive statistics – graphical summary Introduction to basic graphical tools Probability and the Normal Distribution 	<p>2 WEEK GAP Project Working Minitab Coaching Clinic (1 session)</p>



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Month 7 – 9: Provides full toolkit for taking a data driven approach to process improvement and root cause analysis [5 days training + 3 coaching]

Module 7 (2 days) Statistical Methods in Measure: MSA, SPC & Process Capability		Module 8 (1 day) Root Cause Analysis using 8D	Module 9 (2 days) Advanced Statistical Analysis and Modelling techniques	
<p>A two day module which provides the tools to use Value Stream Mapping to identify and Plan a programme of improvement activities</p> <p>Outcome:- This module will enable candidates to work individually or with small teams to map and analyse a Value Stream and define a programme of improvement activities</p>		<p>1 day module – part 2 of building the delegate's change management skills</p> <p>Outcome:- This is core skills module, will further develop the delegates' core facilitation and coaching skills</p>	<p>1 day module building core statistical skill and introducing Minitab</p> <p>Outcome: This is a core skills module which will provide a basic foundation in statistics and the use of Minitab for further modules</p>	
<p>Measurement Systems Analysis</p> <ul style="list-style-type: none"> • Checking the measurement system • Understanding measurement system variation • An introduction to gauge repeatability and reproducibility • Gauge R & R in Minitab for continuous and attribute data 	<p>Base-lining the Current Process</p> <ul style="list-style-type: none"> • Key questions in the measure phase • Assessing Process Control • Understanding different types of process variation • Understanding process control • Anatomy & use of control charts • Applications of SPC charts <p>Assessing Process Capability</p> <ul style="list-style-type: none"> • Understanding process capability • Calculating process capability for continuous and attribute data • Selecting appropriate capability metrics & indices • Communicating statistics to a non-technical audience 	<p>Problem Solving using 8D</p> <ul style="list-style-type: none"> • The 8 problem solving disciplines • Grasping the Current Situation • Emergency response actions • Forming the team • Taking a facts driven approach • Use of Is/Is Not analysis • Understanding the situation • Identifying most probable causes • Managing the investigation • Different levels of causes • Implementing countermeasures • Solution identification/selection • Application of mistake proofing • Testing countermeasures • Checking and acting on results • Permanent countermeasures • Sharing lessons learned • Standards & process confirmation 	<p>Advanced Graphical Analysis Tools</p> <ul style="list-style-type: none"> • Understanding and fitting probability distributions • Dealing with non-normal data <p>Introduction to Hypothesis Testing</p> <ul style="list-style-type: none"> • Use of inferential statistics • Understanding confidence intervals • Developing statistical hypotheses • Setting confidence levels • Sampling risk • Running hypothesis test: variable and attribute data • Managing power & sample size • Practical application of hypothesis testing – case studies and examples 	
		<p>4-6 WEEK GAP Project Working Coaching (1 session)</p> <p><i>Delegates facilitate improvement activity using statistical methods</i></p>	<p>2-4 WEEK GAP Project Working Coaching (1 session)</p> <p><i>Delegates facilitate 8D problem solving activity</i></p>	<p>2-4 WEEK GAP Project Working Coaching or Minitab Coaching Clinic (1 session)</p> <p><i>Delegates continue to work on practical problem solving activities</i></p>

Month 10 – 14: Tools for ensuring improvement activities are sustained + consolidation of course and completion or project work [3 days training + 3 days coaching]

Module 10 (2 days)	Consolidation	End Point Assessments (Qualification Process)	
<p>Providing a robust toolkit for implementing and sustaining improvements</p> <p>Outcome:- how to manage the Improve-Control phase of larger projects and to assess and continually improve the control plans of existing processes</p>	<p>A half-day session followed by project reviews that brings together all the modules</p>	<p>At the end of the programme there is an End Point Assessment (EPA). This consists of three distinct assessment methods:</p> <ul style="list-style-type: none"> • Multi-choice exam – to assess knowledge elements of the standard • Project report, presentation & questioning – to holistically assess knowledge, skills and behaviours in the standard • Professional discussion underpinned by Apprentice's log (the ongoing 'diary' which records the activities throughout their learning journey) 	
<p>Process FMEA</p> <ul style="list-style-type: none"> • Identifying weaknesses in the future State process • Use of FMEA to identify potential opportunities for defects • Evaluating and managing risk <p>Improvement Plan</p> <ul style="list-style-type: none"> • Applying FMEA to the future state • Developing the improvement plan <p>Solution Introduction & Control</p> <ul style="list-style-type: none"> • Developing a control plan • Prevention & detection systems • Choice of control method • Out of control action planning • Handover & transferring benefits • Planning for CI 	<p>Implementing Change</p> <ul style="list-style-type: none"> • Managing resistance • Understanding people's response to changes <p>Embedding Change</p> <ul style="list-style-type: none"> • Maintaining momentum/Transferring ownership • Anchoring the change 	<p>It is also required that Apprentices have met the criteria for English and mathematics proficiency (equivalent to GCSE Grade C or above). For candidates who do not currently have this qualification, an additional programme of learning support and testing will be required.</p>	
	<p>Consolidation of improvement practitioner toolkit</p> <p>Lessons learned and next steps</p> <p>Exam revision</p>		

