Six Sigma Business Green Belt

January 2019 programme:
Block 1: Jan 14 to 16
Block 2: February 13 to 15
Block 3: March 11 to 13

March 2019 programme:
Block 1: Mar 13 to 15
Block 2: Apr 9 to 12
Block 3: May 15 to 17

Duration:	10 Days (9 Days for Jan programme)
Fee:	£2025+VAT

Includes:
- Comprehensive training manual
- Smallpeice accreditation
- Lunches and refreshments
- Lean Sigma toolkit
- Access to Lean Sigma website

How to Book:
Call +44(0)1926 336423
Email train@smallpeice.com
Visit www.smallpeice.com

Venue:
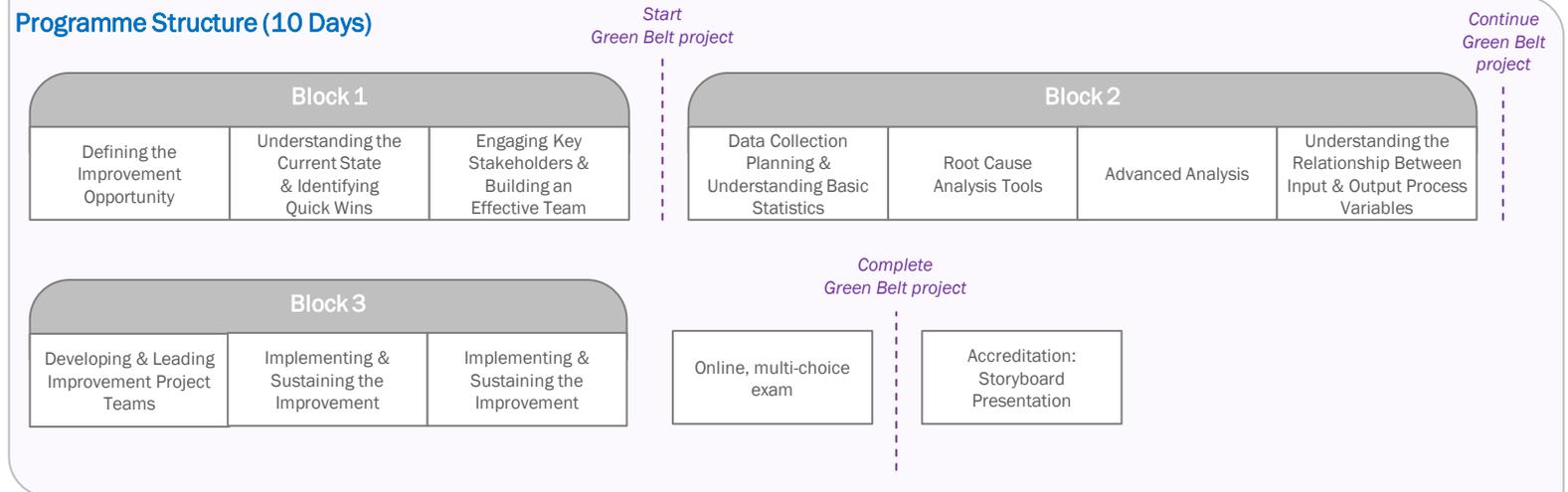Smallpeice is in central UK (Leamington Spa – CV32 4ES), with easy access:
- by road: from the M40
- by rail: a 5-minuite taxi journey from Leamington Spa station
- by air: just 25 minutes from Birmingham Airport

Introduction
This programme integrates Lean and Six Sigma to provide a powerful improvement model that concentrates on both reducing cycle time and variability. The programme is based on a modular format which combines training inputs and practical simulation activities with an ongoing focus on project progress and reviews. The training objectives focus on enabling delegates to:

- lead projects that deliver tangible organisational benefits
- be familiar and confident with the key tools and techniques of Lean Sigma and understand how to use them within day-to-day activities
- be effective team members on any Lean Sigma project team

Programme Structure (10 Days)

Start Green Belt project

Continue Green Belt project

Block 1

Defining the Improvement Opportunity	Understanding the Current State & Identifying Quick Wins	Engaging Key Stakeholders & Building an Effective Team

Block 2

Data Collection Planning & Understanding Basic Statistics	Root Cause Analysis Tools	Advanced Analysis	Understanding the Relationship Between Input & Output Process Variables

Block 3

Developing & Leading Improvement Project Teams	Implementing & Sustaining the Improvement	Implementing & Sustaining the Improvement

Complete Green Belt project

Online, multi-choice exam	Accreditation: Storyboard Presentation

Accreditation
The Smallpeice accreditation process requires completion of a project for formal assessment and passing a multi-choice exam. The exam can be taken online after training is completed (revision and practice questions are also provided).

BQF Accreditation Option
Smallpeice courses are also licensed to BQF (British Quality Foundation) standards, enabling candidates to achieve this external accreditation. The accreditation steps are as described above, with an additional £250 fee to cover the BQF licensed accreditation route.

Coaching & Support
Coaching and support is available in the form of structured face-to-face coaching, or remote support via webex / phone. We also offer a pre-accreditation check which provides a detailed review of projects prior to accreditation submission. Please call to discuss these options in more detail.

Detailed programme overleaf

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V2017.1-Six Sigma Business Green Belt

Detailed Programme of Content

BLOCK 1

Day 1	Day 2	Day 3
Defining the Improvement Opportunity	**Understanding the Current State & Identifying Quick Wins**	**Engaging Key Stakeholders & Building an Effective Project Team**

Day 1 — Defining the Improvement Opportunity

Programme Introduction & Objectives
• Improvement project roles and responsibilities

The Improvement Roadmap
• Introduction to the lean sigma approach
• The DMAIC project roadmap
• Project selection criteria
• Where are the biggest opportunities? Pareto analysis
• Application of the DMAIC toolkit in daily work

The Define Phase
• Introduction to the define phase
• Initiating a project charter & writing problem statements
• Setting improvement objectives
• Scoping the project - the Y=f(x) cascade
• Mapping the high level process – SIPOC mapping

Understanding the Voice of the Customer
• Understanding our customers
• Techniques for collecting and analysing the voice of the customer
• Defining critical to quality characteristics
• Finalising the project charter

Day 2 — Understanding the Current State & Identifying Quick Wins

The Measure Phase
• Introduction to measure phase
• The difference between process bias and data bias projects – navigating the roadmap

Understanding the Current State
• Defining value and waste: the 8 business process wastes
• Defining value streams
• Mapping the current state for business processes
• Facilitating mapping activities – hints and tips

Detail Process Mapping Tools
• Detail process mapping tools overview
• Role of process mapping in DMAIC projects
• Process flow and sequence charting techniques
• Identifying and implementing quick wins

Identifying Potential Process Issues
• Identifying weaknesses in the process
• Use of failure mode effects analysis (FMEA) to identify potential opportunities for defects
• Evaluating, reducing & managing risk

Day 3 — Engaging Key Stakeholders & Building an Effective Project Team

Enablers for Project Success
• Pre-requisites for project success
• Analysing the enablers and barriers using force field analysis
• Building and communicating the business case

Securing Project Sponsorship
• The role of the project sponsor
• Identifying and engaging senior support
• Setting a sponsorship contract

Engaging Key Stakeholders
• Stakeholder analysis tools
• Understanding what motivates people
• Dealing with initial resistance
• Influencing skills

Building and Managing the Project Team
• Who should be involved in the project?
• The role of the Belt as facilitator
• Building an effective team
• Assigning roles
• Developing the project plan

BLOCK 2

Day 4	Day 5	Day 6	Day 7
Data Collection Planning & Understanding Basic Statistics	**Root Cause Analysis Tools**	**Advanced Analysis**	**Understanding the Relationship Between Input & Output Process Variables**

Day 4 — Data Collection Planning & Understanding Basic Statistics

Data Collection Planning
• Selecting what to measure
• Key considerations for data collection planning
• Deciding how to collect the data
• Using effective operational definitions
• Checking the measurement system

Introduction to Basic Statistics
• Measures of location; variation and proportion
• Introduction to probability

Visualising the Data
• Introduction to Minitab software
• What shape is your data? Histograms
• Visualising descriptive statistics: graphical summary tool

Assessing Process Control
• What is happening over time? Time series plots
• Introduction to process control & control charts

Day 5 — Root Cause Analysis Tools

Assessing Process Capability
• Understanding process capability
• Introduction to calculating process capability for continuous and attribute data
• Selecting appropriate capability metrics & indices

The Analyse Phase
• Introduction to the analyse phase
• Process and data analysis roadmaps

Verifying the Root Cause: Data Analysis Toolkit
• Taking a structured approach to data analysis
• Writing an analysis plan
• Link to cause and effect diagram
• 5 Why approach to problem solving
• Stratifying the data – use of box plots
• Are there any relationships? Scatter diagrams
• Non-graphical methods for verifying the root cause
• Tips for summarising and presenting the analysis

Day 6 — Advanced Analysis

Advanced Graphical Analysis Tools
• SPC charts for variable and attribute data
• Use of Z-values and sigma values as capability metrics in a business environment
• Understanding and fitting probability distributions
• Dealing with non-normal data

Introduction to Hypothesis Testing
• Use of inferential statistics
• Understanding confidence intervals
• Developing statistical hypotheses
• Setting confidence levels – understanding
• sampling risk
• Running and interpreting hypothesis test for variable and attribute data
• Managing power & sample size
• Practical application of hypothesis testing – case studies and examples

Day 7 — Understanding the Relationship Between Input & Output Process Variables

Introduction to Regression Analysis
• Understanding correlation
• Introduction to simple linear regression
• Application in lean sigma projects

Optimisation Processes: Design Of Experiments
• Introduction to designed experiments (DOE)
• Applications of DOE techniques
• Conducting a simple DOE experiment

BLOCK 3

Day 8	Day 9	Day 10
Designing a Lean Future State	**Developing & Leading Improvement Project Teams**	**Implementing & Sustaining the Improvement**

Day 8 — Designing a Lean Future State

Process Analysis: Developing a Future State
• Scoping improvement activity
• Developing a future state map
• Creating flow and just-in-time processing
• Mistake proofing

Developing Alternative Solutions
• Challenges of the improve phase
• Innovation tools
• Generating alternative solutions

Developing the Improvement Plan
• Application of FMEA to the future state
• Optimising the solution
• Developing the improvement plan

Day 9 — Developing & Leading Improvement Project Teams

Leading & Developing Improvement Teams
• Characteristics of effective teams & stages of team development
• Developing performing teams through effective leadership

Facilitating for Maximum Results
• Running effective workshops & meetings
• Managing conflict / dealing with challenging people & situations
• Adapting communications for groups

Implementing Change
• Putting the plan into action
• Understanding people's response to changes in their ways of working

Embedding Change
• Maintaining momentum
• Transferring ownership & anchoring the change

Day 10 — Implementing & Sustaining the Improvement

Selecting & Validating Solutions
• Solution selection, testing & piloting
• Check list for solution validation Implementation planning
• Piloting & solution introduction

Solution Introduction & Control
• Developing a control plan
• Prevention & detection systems
• Choice of control method
• Out of control action planning
• Creating a visual workplace
• The role of standards and process confirmation
• Handover & transferring benefits
• Planning for continuous improvement