Smallpeice Enterprises

a division of GP Strategies Limited

Lean Six Sigma

Manufacturing Black Belt Upgrade

Manufacturing Focused Content

Virtual Training Delivery

Open Enrolment Calendar

Fully Accredited

train@smallpeice.com

Introduction

The Black Belt Upgrade programme is designed for candidates who have already studied and qualified as a Green Belt. The 'Manufacturing' upgrade path focuses on the advanced tools and techniques to develop expert Lean Six Sigma practitioners who are able to:

- Assess improvement opportunities and have the skills to select the right approach problem solving methodology.

- Lead and deliver large-scale cross-company projects delivering significant and quantifiable operational benefits.

- Encourage the cascade of Lean Six Sigma by supporting Green & Yellow Belts, and liaising with key sponsors and stakeholders to provide input to the company improvement strategy.

Programmes include:

▶ **Open enrolment** calendar with choice of live virtual training or classroom-based events at regional venues.

▶ **In-company programmes** for group training at your company site.

▶ **Interactive delivery style** with case study team exercises to bring alive the technical content and showcase applications to transactional projects.

▶ **Extensive course materials hub** including user-friendly Lean Six Sigma toolkit; consolidation learning via supplementary e-learning modules; dozens of templates and proformas ready to use for your project.

▶ **Industry recognised accreditation standards** via Smallpeice or our external partnership with the British Quality Foundation.

▶ **Optional add-on coaching packages** to guide and fast-track you through your project.

Minitab Software:

During the Black Belt programme, you will learn how to use Minitab – which is the industry standard software for Lean Six Sigma. Whereas Green Belt level projects can be handled via Excel, the deeper level of data and graphical analysis at Black Belt needs the bespoke functionality of Minitab. If you do not have Minitab licenses in your company already – this is something you will need to explore before enrolling by visiting www.minitab.com.

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**For bookings & enquiries
email train@smallpeice.com**

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	DEFINE	MEASURE				
Feb 2026 course	February 13 (1 day)	February 17 (½ day)	February 18 (1 day)	March 2 (1 day)	March 10 (1 day)	March 11 (1 day)
Mar 2026 course	March 31 (1 day)	April 17 (½ day)	April 22 (1 day)	May 1 (1 day)	May 5 (1 day)	May 6 (1 day)

SESSION 1:
8.30am – 4.30pm

MANAGING & DEFINING BLACK BELT PROJECTS
- DMAIC versus DMADV projects
- Scoping complex cross-functional projects
- Value stream mapping as a scoping tool
- Aligning the project to business strategy
- Managing project reviews (tollgates)
- Considering project risks

SESSION 2:
8.30am – 12.30pm

VALUE STREAM MAPPING
- Introduction to Value Stream Mapping
- Creating a Current State Map
- Using VSM as a Scoping Tool
- Identifying the Opportunities

SESSION 3:
8.30am – 4.30pm

DATA COLLECTION
- The role of data collection planning throughout a DMAIC project
- Use of Is/Is Not to find gaps in knowledge
- Understanding variation
- Selecting what to measure
- Calculating sample size
- Sampling considerations
- Developing a robust data collection plan
- Guidelines for survey sampling

SESSION 4:
8.30am – 4.30pm

MEASUREMENT SYSTEM ANALYSIS
- MSA fundamentals
- Type 1 studies for repeatability
- Type II studies (reproducibility)
- Nested gauge R&Rs for destructive tests
- Assessing linearity & bias aspects of calibration
- Assessing stability (of bias during calibration)
- Attribute agreement analysis for pass/fail judgements

SESSION 5:
8.30am – 4.30pm

PROCESS CAPABILITY & PROCESS CONTROL
- Assessing process control
- Use of control charts
- Applications of SPC charts for variable and attribute data
- Understanding process capability
- Calculating process capability for continuous & attribute data
- Selecting appropriate capability metrics & indices

SESSION 6:
8.30am – 4.30pm

ADVANCED STATISTICAL APPROACHES
- Understanding probability distributions for variable and attribute data
- Dealing with non-normal data
- Capability analysis for non-normal data
- Statistical process control charts for non-normal data
- The central limit theorem
- Understanding and using data transformations

Live Training via MS Teams

This programme is designed for an interactive training experience delivered via MS Teams. Delegates will work in syndicate groups on case study exercises and learn from facilitators who are passionate about delivering an effective & enjoyable virtual Lean Six Sigma training experience.

Accredited Training

To qualify as a Black Belt, delegates will take an online multi-choice exam plus complete and submit a project for assessment. Full guidance is provided on the project requirements. There is also an option to receive external accreditation via the British Quality Foundation (BQF) for an additional surcharge fee of £250+VAT.

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	ANALYSE						IMPROVE		CONTROL
Feb 2026 course	Mar 19 (1 day)	March 25 (1 day)	March 31 (½ day)	April 1 (1 day)	April 20 (1 day)	April 21 (1 day)	April 28 (1 day)	May 19 (1 day)	May 20 (1 day)
Mar 2026 course	May 14 (1 day)	May 15 (1 day)	May 18 (½ day)	May 19 (1 day)	May 27 (1 day)	May 28 (1 day)	June 4 (1 day)	June 25 (1 day)	June 26 (1 day)

SESSION 7: 8.30am – 4.30pm	SESSION 8: 8.30am – 4.30pm	SESSION 9: 8.30am – 12.30pm	SESSION 10: 8.30am – 4.30pm	SESSION 11: 8.30am – 4.30pm	SESSION 12: 8.30am – 4.30pm	SESSION 13: 8.30am – 4.30pm	SESSION 14: 8.30am – 4.30pm	SESSION 15: 8.30am – 4.30pm
ANALYSE PHASE • Verifying the root cause • Taking a structured approach to data analysis • Links to the cause and effect diagram • 5 Why approach to problem solving • Box plots & scatter diagrams • Significance testing approach • Tips for summarising and presenting the analysis	**HYPOTHESIS TESTING** • Use of inferential statistics • Writing a hypothesis statement • Setting a confidence level • Understanding the P-Value • Tests for variable and attribute data • Power & sample size • Non-parametric techniques	**INTRO TO DOE** • Overview of DOE techniques • Optimisation challenge • Applications of DOE techniques	**OPTIMISING THE PROCESS** • Regression analysis • Understanding correlation • Introduction to simple linear regression • Introduction to multiple regression	**SCREENING & TAGUCHI METHODS** • Introduction to fractional factorial • Screening designs • Advanced techniques e.g. EVOP, RSM • Taguchi loss function • Taguchi designs that deliver robust solutions in the presence of noise	**ADVANCED DOE TECHNIQUES** • Mixed and multi-level designs • Response surface designs • Botched runs • Randomisation and grey coding • DOE with historical data	**SITUATIONAL LEADERSHIP** • Transformational leadership • Influencing change • Concepts and models for change • Persuasion campaigning	**COACHING IMPROVEMENT TEAMS** • The key skills of coaching • The coaching continuum expert to discovery • Using the GROW model	**IMPLEMENTING CONTROL** • Key steps of the Control phase • Confirming the improvement • Developing a control plan • Different types of process control • The principle of mistake proofing • Monitoring effectiveness • Closing the improvement project

TRAINING FEE

The cost per participant is £2850+VAT. Fees are fully inclusive of:

- Live training via MS Teams
- Access to materials hub
- The full accreditation process: exam plus project assessment and certification

HOW TO BOOK

Please email Smallpeice via train@smallpeice.com with your enquiry/requirements. Our experienced Lean Six Sigma booking team will then send you a booking form. Following enrolment, we will onboard participants to the programme platform which will provide a detailed menu of activities and preparation.

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Options

Coaching Support
This can be provided via a series of 3 x 1-hour 1-to-1 sessions, delivered via MS Teams. These can be scheduled to suit the progress of your project. The cost of the coaching package is £495+VAT.

Accreditation via British Quality Foundation (BQF)
The option for accreditation via the internationally recognised body of the British Quality Foundation is available for an additional fee of £250+VAT.

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Payment Terms
* An invoice will be issued following receipt of a confirmed booking.
* Payment is due 30 days from the invoice date.
* Payment can be made via credit card or bank transfer. Payment details can be found on the invoice.

Cancellation Terms
If you should have to cancel a registration, the following options are available:
* Send a substitute delegate at no additional charge
* Incur a cancellation fee based on the following timescales:
    – If you cancel prior to 30 working days before the course you will be charged a cancellation fee of 20% of the course fee
    – If you cancel less than 30 working days, but prior to 10 working days before the course, you will be charged a cancellation fee of 50% of the course fee
* We regret that we cannot accept cancellations that are received less than 10 working days before the course start date.
* Please confirm your cancellation in writing.

Smallpeice Enterprises reserves the right to cancel courses if necessary. Delegates will be given advance notice of any such changes. Please do not send payment with this form – an invoice will be despatched.

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