

Six Sigma Black Belt

The Ultimate Six Sigma Qualification

PMI Six Sigma black belt training generates a powerful new resource for your organisation. An intensive training process of four weeks over four months enables delegates to lead or facilitate six sigma projects and become accredited as Black Belts. The programme builds upon all of our experience to combine the best of the technical toolset with sympathetic and robust learning design.

Taking part in PMI black belt training ensures delegates will:

- become knowledgeable about the six sigma concepts and methods, and how to apply them
- work with stakeholders, sponsors and GBs to more effectively manage change
- lead teams to achieve results in an ever shorter time frame
- present their project status to executives in a concise but complete manner

What's included?

- Pre-course webinar with the course tutor and other delegates
- 12 month access to the Online Yellow Belt
- 12 month access to the Essential Tools for Improvement Series
- Full Reference Manuals
- A copy of The Process Manager Handbook of tools and techniques
- A project review and exam session day

Six sigma projects

Improvement projects are the engines of Six Sigma programmes and a vital component of the PMI's Black Belt programme. They should be selected by the steering team as a result of analysis of the whole system, in the context of the strategic goals and current vital issues. Their successful implementation is a critical part of achieving the business case.

“ It has helped us to see processes as a way of understanding how problems cascade through operations ”

How long does it take?

4 modules of 5 days made up of 2 x 5 days Green Belt & 2 x 5 days Black Belt Conversion.

What are the benefits?

Delegates will leave equipped to promote and practise advanced six sigma tools and techniques, having successfully completed a significant improvement project.

Who should attend?

Highly motivated individuals working in improvement.

Those who are confident in working with complex numbers and statistics.

Delegates must bring a laptop computer and Minitab software (available through PMI).

How can I do it?

As an in-house programme in your company/organisation.

As part of our public training programme in London, Birmingham or Manchester



Find out more at www.pmi.co.uk

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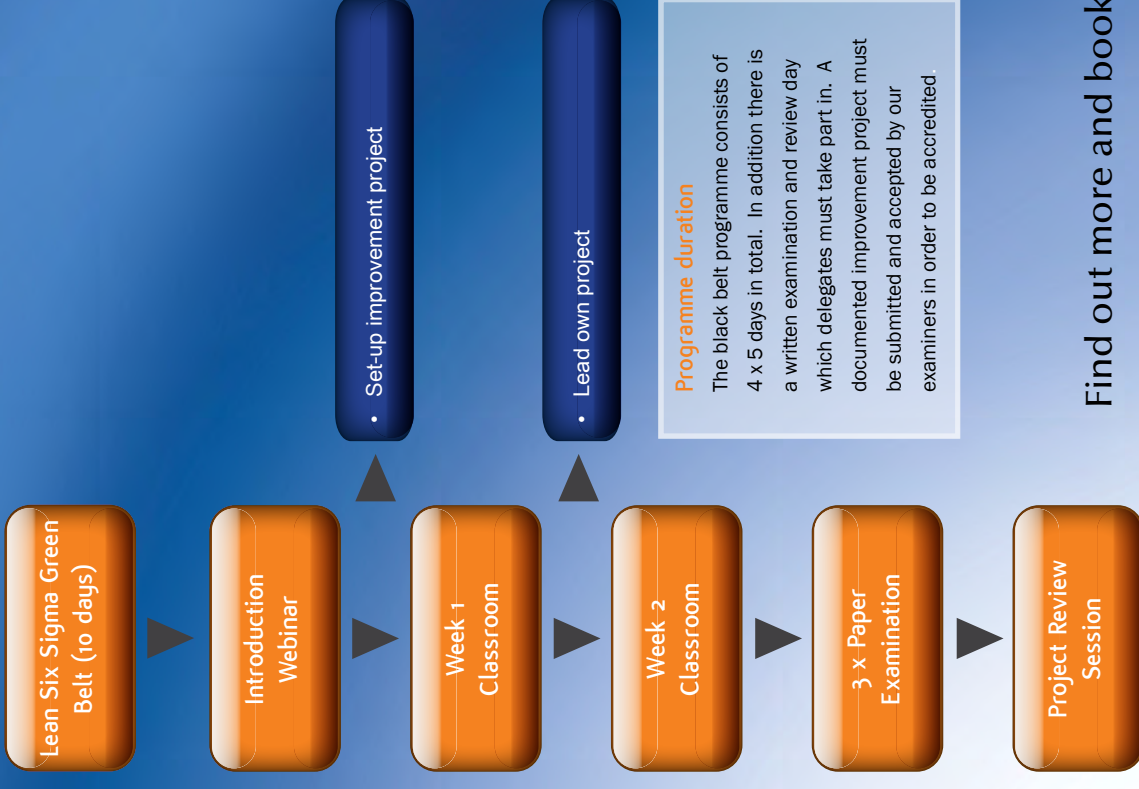
Week 1

- Introduction to Six Sigma
- The need for organisational cultural change and the process to make it happen
- Customer focus and affect on organisations
- The roles of black belts and other key players in the six sigma programme
- Process improvement learning cycles and other models to support improvement projects (PDSA, DMAIC)
- Six Sigma metrics include Defects Per Million Opportunities
- System view of the business
- Linking a learning philosophy to process improvement
- The role of chartering and contracting in project selection
- Requirement of leadership in the change process and how to intervene effectively
- Additional control charting techniques:
 - p, np, c, u
 - charts for processes with trends
- Advanced statistical measures such as chi-squared, T-tests, ANOVA, regression analysis and associated tools to investigate and verify causes of variation
- Strategies to deal with short run SPC
- Introduction to Minitab
- Role as a Green Belt coach
- Consulting and influencing skills
- Handling subjective data

Week 2

- Solution generation tools including Triz
- introduction to design of experiments.
 - DoE – full factorial
- Ensuring project engagement and avoidance of pitfalls of change challenges
- Executive and champion reviews
- Advanced regression
- Communication skills
- FMEA
- Sampling, sample size and Power
- Project Reviews
- Case Studies
- Further hypothesis testing
- Implementation planning
- Process performance and capability
- Effects of non-conformance using the Taguchi loss function and the importance of setting the process aim

Course Structure



Find out more and book online at

www.pmi.co.uk or call us on

+44 (0)1676 522 766



Process Management International



Chartered Quality Institute