



6-day Black Belt Conversion

Managing Improvements using Lean and Six Sigma

Course Description

Lean Green Belts are able to lead local improvement projects; Black Belts are expected to address more challenging cross function/departmental projects. Such projects require advanced skills and the Black Belt Conversion course teaches these as two 3-day modules.

This course is part of the Burge Hughes Walsh Lean Six Sigma Programme that includes:

- **2-day Managing Lean Six Sigma Projects Course** for project sponsors
- **5-day Lean Six Sigma Basics Course** provides the basic training to create the skilled people who will do the improving
- **5-Day Lean Green Belt Advanced Course** adds to the training in this course by teaching data-driven root cause analysis.

Who Should Attend?

This course is aimed at individuals who have completed their Lean Green Belt training and ideally have successfully led at least one improvement project.

Benefits to the Individual and Business

During an intensive six days of teaching and practical 'hands on' exercises, participants will be challenged to develop the skills and mind-set to lead improvement activities in their organisation

At the end of the course participants will:

- appreciate that all organisations need to continuously improve
- understand how Lean Six Sigma provides a rigorous approach to process improvement, using *data*
- know how to conduct advanced data analyses
- know how to search for root causes using the Design of Experiments
- know how to manage improvement projects by team engagement
- be able lead a Black Belt project.

Learning Approach

The learning approach is based on the Kolb learning cycle with a significant proportion of the course set aside for exercises to reinforce the learning. Indeed, the course employs a number of small group exercises involving a case study to provide a practical focus for the course which enables the delegates to practise the DMAICT methodology and tools.

Course Delivery

The course has been designed for minimum numbers of 4 and maximum of 10 and can be delivered on site or at a suitable venue.

Course Structure

Agenda for Conversion Module 1

Day 1	Day 2	Day 3
Introduction	Combining Distributions	Hypothesis Testing Applications & Case Studies
GR&R for Discrete Data	Hypothesis Testing	Regression - SLR
Lunch	Lunch	Lunch
Process Capability for Discrete and Continuous Data	Hypothesis Testing Applications & Case Studies	Regression - MLR - Logistic
Sampling Theory		
Review of Day 1	Review of Day 2	Review of Day 3

Agenda for Conversion Module 2

Day 1	Day 2	Day 3
Introduction	Combining Distributions	Response Surface Methods
Managing Black Belt Projects	Full Factorial DoE	DoE Summary
Lunch	Lunch	Lunch
Managing Black Belt Projects	Fractional Factorial DoE & Screening Designs	DoE Consolidation Exercise
	Noise in DoE	
Review of Day 1	Review of Day 2	Wrap Up & Close

Course Costs

The cost of delivering the 6-day course, excluding delivery tutor accommodation and expenses, but including all courseware is £8,700. VAT will apply at the prevailing rate.

The course can be tailored to suit individual customer's operations.

More Information and Contact Details

For more information about the 6-day Black Belt Conversion Course or any of our other courses please contact **Dr Stuart Burge** on +44 (0)7803 131614 or sburge@burgehugheswalsh.co.uk.