



Lean Green Belt Advanced Making Improvements using Lean and Six Sigma

Course Description

The Lean Green Belt Advanced course gives participants the core skills to improve processes in their areas through the application of Lean and the Six Sigma DMAICT¹ methodology. This module complements the Basic by teaching data driven root cause analysis. In process situations where it is necessary to reduce the process variation the full might of the Six Sigma statistical tool kit is necessary. The focus of this course is on data collection and analysis. The course introduces the application of the Minitab statistical analysis software. It can be delivered in two sessions of two- and three-day duration or as a five-day course Monday-Friday.

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 Basic Course** provides the basic training to create the skilled people who will do the improving
- **5-day Black Belt Conversion Course** to enable green belts to convert to full Black Belt status.

Who Should Attend?

This course is aimed at individuals who have completed Module 1 and have a requirement to develop their process improvement skills further to include the statistical analysis tools.

Team applications are welcomed and the course schedule can be arranged to suit the timescales of the team.

Benefits to the Individual and Business

During an intensive five 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 organization

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 collect relevant data from a process
- know how to analyse the collected data to search for the true root cause(s)
- know how to exploit the data analysis to reduce variation
- know how to put controls in place to sustain the improvements
- be able support a Green or Black Belt specialist as a project team member/data analyst .

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.

¹ DMAICT – a structured improvement methodology: Define - Measure – Analyse – Improve – Control – Transfer

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 Agenda

Day 6	Day 7	Day 8	Day 9	Day 10
<p>Introductions</p> <p>Re-Introduction to Variation</p> <p>Define Phase</p> <p>- Baselining process capability</p>	<p>Review of day 6</p> <p>Measure Phase</p> <p>Measurement System Analysis</p>	<p>Review of day 7</p> <p>Measure Phase</p> <p>Process Capability</p>	<p>Review of day 8</p> <p>Analyse Phase</p> <p>Hypothesis Testing</p>	<p>Review of day 9</p> <p>Control Phase</p> <p>Control Charts</p>
Lunch	Lunch	Lunch	Lunch	Lunch
<p>Measure Phase</p> <p>Sampling Theory</p>	<p>Measure Phase</p> <p>Graphical Analysis</p>	<p>Analyse Phase</p> <p>Hypothesis Testing</p>	<p>Analyse Phase</p> <p>Correlation and Regression</p>	<p>Control Phase</p> <p>Control charts contd.</p> <p>Course Review, Summary and close</p>

Course Costs

The cost of delivering the 5-day course, excluding delivery tutor accommodation and expenses, but including all courseware is £6,500. 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 5-day Lean Green Belt Advanced Course or any of our other courses please contact **Mr Stephen Walsh** on +44 (0) 777579 4472 or swalsh@burgehugheswalsh.co.uk.