Lean Six Sigma Green Belt

This programme provides the route to attaining benchmark British Quality Foundation Green Belt Certification but is equally for delegates who simply want to find out in detail what Lean Six Sigma is and how it works.

Who is the course for?

- You would like to get a thorough grounding in the principles and practice of Lean Six Sigma and learn how to apply it in your workplace
- You would like to implement Lean, Lean Six Sigma or Continuous Improvement but don't know how
- You would like a proven systematic approach to tackle business problems and inefficiencies without the need for sophisticated statistical tools
- You know very little about process improvement or…
- You already have a lot of experience in process improvement and would like to understand how the techniques you know about fit together in a powerful, coherent structure
- You are from a service or manufacturing organisation. You would like to become a British Quality Foundation Certified Lean Six Sigma Green Belt with the associated career enhancement opportunities
- You are ready to begin your journey towards becoming a Black Belt – we've found that learning the project principles first and then adding advanced Statistical and Change tools through further training modules is a much more effective way to progress.

Learning Outcomes

This course teaches you how to lead improvement projects using Lean Six Sigma's world-class structured problem solving approach, tools and principles and become a Green Belt. It teaches you how to understand, measure and manage processes. It teaches you how to collect and use process data but is free from advanced statistics.

Outcomes for Your Business:
Delegates are equipped to deliver customer service and quality improvements, business efficiency and productivity improvements and a more effective and satisfying working environment

Outcomes for Your Personal Development:

Following successful completion of your first successful project, you will have the option to be certified by the British Quality Foundation with the ensuing recognition and career advancement opportunities.

Support Pack

All delegates receive
- 12 months access to Catalyst's online **Business Improvement Zone** – over 150 short videos covering the entire course content
- Printed and pdf copies of the course slides
- The Lean Six Sigma Improvement Journey Book and Pocket Guide
- The Managing Change Pocket Guide
- Downloadable Green Belt project Tools and Templates
- Downloadable guide on using Excel to understand process data
- Lean Six Sigma Project Guide
- Lean Six Sigma Green Belt exam

Follow-on Options

- British Quality Foundation Green Belt Certification
- Project Coaching Support Service
- Lean Six Sigma Project Team Member e-learning training pack
- The Green Belt Course is the *foundation* for building your Lean Six Sigma skills now or later– courses which follow on directly include
    - Managing Change
    - Lean Six Sigma for Innovation and Design (Design for Six Sigma)
    - Advanced Green Belt
    - Black Belt

Green Belt Course Contents

Introduction:
- Key principles and foundations of Lean and Six Sigma
- Waste and Flow
- Variation and Sigma values
- Roles and Responsibilities
- The systematic approach (DMAIC)
- Project Selection
- Intro to Change Management

The programme then follows the DMAIC (Define, Measure, Analyse, Improve, Control) phases, we cover 8 steps within this framework, covering relevant tools and techniques under each of these headings as follows:

Define Phase:
Step 1 - Select the Problem
- Improvement Charter
- SIPOC
- Focus on the Customer
- Voice of the customer and business
- Critical To Quality requirements
- In frame / out of frame
- Stakeholder analysis
- Elevator speech

Measure Phase:
Step 2 – Understand the Current Situation
- Process Stapling
- Value added flow analysis
- Process mapping: Deployment Flow Charts and Value Stream Mapping
- Moments of Truth
- Data collection
- VOC to CTQ Matrix
- CTQ to Output Measures matrix
- Operational Definitions
- Measurement Plans
- Continuous and Attribute data
- Introduction to Gauge R and R
- Data collection methods
- Y to X (output to inputs) matrix
- Output, Input and In-process measures
- Introduction to Sampling methods
- Variation
- Statistical Process Control Charts
- Special & Common Cause Variation
- Process Capability
- Process Sigma

Analyse Phase:
Step 3 - Identify & Check the Possible Causes
- Fishbone/Ishikawa diagrams
- Negative Brainstorming
- Interrelationship Diagrams
- Developing measurements of possible causes
- Process Flow and Waste
- Introduction to Data Analysis Techniques

- Pareto Charts
- Basic Graphs
- Scatter diagrams
- Hypothesis Tests
- Regression Analysis
- Introduction to Design of Experiments
- Logical Cause testing
- Financial & Tollgate reviews
- Introduction to Multi-Generational Plans

Improve Phase:

Step 4 – Generate Possible Solutions
- Lean Solutions
- SMED
- Batch size reduction
- Pull processing
- Product Families, 3Rs and Cells
- Introduction to Theory of Constraints
- Process Levelling and Sequencing
- 5S
- Creative thinking
- Assumption Busting
- Catalyst
- Ideas Box

Step 5 – Select the Solution
- N/3 and Paired Comparisons
- Prioritisation Matrices
- Force Field Analysis
- XY grids

Step 6 – Plan & Test the Solution
- Process Pilot
- FMEA
- Poke Yoke
- Financial Review - Cost benefit analysis

Control Phase:

Step 7 – Implement & Standardise the Solution
- Process management
- Visual Management
- Control Plans
- Standardisation
- Documentation
- Response Plan
- Control Charts

Step 8 – Assess Achievements & Lessons
- Storyboards

- Final Review / Post Project Review
- Recognition

Catalyst offers British Quality Foundation accredited Lean Six Sigma training from Awareness through to Master Black Belt level including workshops for Executive Teams and Project Champions.