

## Catalyst's British Quality Foundation

# Lean Six Sigma Green Belt Programme

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. The course can be delivered face to face in the classroom in-house or through our open programme, online or through various blended combinations which we can configure to suit your needs. This course also is the first module of our BQF Lean Six Sigma Black Belt and BQF Business Black certification programmes.

### 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 tools through further training modules is a much more effective way to learn.

### Learning Outcomes for Your Business

Delegates are equipped to deliver improvements in customer service, product and service quality, business efficiency and productivity, environmental impact and create a more effective and satisfying working environment.

### Learning Outcomes for Your Personal Development

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.

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.

### How can I take this course?

This is our most popular course. It is available:

- Every month as a 6 day virtual training programme (3+3 days) through our open training programme
- As a 6 day virtual programme within your company – configured to meet your needs and accommodate delegates from different time-zones where required
- As a physical classroom in-house programme in a 5 or 6-day format
- Every 1-2 months in our open training venues (London, Birmingham, Edinburgh) in a 5-day format
- As a self-study online programme on our state-of-the-art Learning Management System – you will be assigned a personal tutor to support your learning

Blended learning options are also popular – bespoke combinations of online modules, facilitated classroom workshops and live webinars.

### Prerequisites

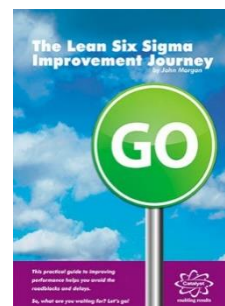
None – this course assumes no prior knowledge of Lean Six Sigma.

**You do not need Minitab** software to complete this programme as many Green Belt projects, particularly in non-manufacturing environments do not require the level of statistical training which would involve statistical software. However, there are free to use graphical tools on the Catalyst website which we include in the training.

### Support Pack

All physical and virtual classroom delegates receive

- 12 months access to Catalyst's online **Business Improvement Zone** – over 150 short videos recorded live in the classroom 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
- Lean Six Sigma Project Guide
- Project Storyboard Guide
- British Quality Foundation 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 Continuous Improvement skills now or later. Courses/programmes which follow on directly include:
  - Facilitating and Leading Change
  - Lean Six Sigma for Innovation and Design (Design for Six Sigma)
  - Business Black Belt
  - Lean Six Sigma Black Belt
  - ICAgile Accredited Business Agility Foundations
  - SAFe Scrum Master
  - Leading SAFe
  - Agile-enabled Lean Six Sigma
  - Value Stream Mapping
  - Leading Continuous Improvement

### Why Choose Catalyst

- Catalyst is a specialist Lean Six Sigma training consultancy, not a generalist training business. We were established in 1995 and have trained many thousands of Green Belts with excellent customer feedback
- Catalyst's instructors are highly experienced subject-matter experts who have honed their skills in business and industry before becoming trainers
- Catalyst is the British Quality Foundation's primary Lean Six Sigma Partner - all of our courses and instructors up to Master Black Belt level are accredited by the BQF
- We are one of only two Lean Six Sigma training providers recommended by the Chartered Quality Institute
- Our courses are highly interactive and use relevant examples and case studies
- We are the authors of the best-selling Lean Six Sigma for Dummies



### Green Belt Course Contents

The content is the same for classroom and online programmes

#### 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 and Review
- Introduction 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
- VOC to CTQ Matrix
- 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
- Continuous and Attribute data
- Output, Input and In-process measures
- CTQ to Output Measures matrix
- Y to X (output to inputs) Matrix
- Operational Definitions
- Introduction to Gauge R and R
- Data collection plan
- Introduction to Sampling methods
- Understanding 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
- 5 Whys
- Negative Brainstorming
- Interrelationship Diagrams
- Process Flow and Waste
- Introduction to Data Analysis Techniques
- Data segmentation
- Pareto Charts
- Basic Graphs
- Scatter diagrams

- Introduction to Hypothesis Tests
- Introduction to 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 Cellular Manufacturing
- 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
- XY grids

#### Step 6 – Plan & Test the Solution

- Process Pilot
- Risk Assessment and FMEA
- Poka 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.*