

# **Lean Six Sigma Green Belt Managed Online Learning 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.

This managed programme consists of a combination of virtual instructor-led training sessions and self-study online learning. The sessions are timetabled which dictates the pace of the training, helping to overcome the self-discipline challenge of completing regular online training.



- A series of 6 live facilitated Zoom Video Webinars, typically one week apart and each of 90 minutes duration deliver around 25% of the content and set the pace for programme completion. The trainer and the delegates can interact during the sessions and at an additional weekly online drop-in session.
- During each session, the self-study materials including video content, exercises and quizzes are identified and the delegates then complete them before the next session.
- Chatroom functionality is provided during the instructor led training to enable the sharing of questions, answers and ideas.
- The programme finishes with the Green Belt online exam and awarding of a course completion certificate.
- Optionally, delegates can complete a Green Belt project which can be submitted for British Quality Foundation certification assessment.

#### 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.

# Accessing the programme and what's included



The course is configured on our state-of-the-art Learning Management System, The BIZ (Business Improvement Zone). The system can be accessed using the browser on your smartphone as well as your PC/Mac. Although the cycle of training delivery is completed in around 6 weeks, the facilitated sessions are recorded and delegates have access to the BIZ for 12 months.

# Each delegate will receive:

Individual logon to BIZ for 12 months providing access to:

- webinars, videos, exercises and quizzes, 12 months access to Catalyst's online Business Improvement Zone
- Detailed learning guides to help structure your learning and lead you through the videos
- Quizzes at the end of each section to check your progress
- pdf copy of the course slides
- pdf copy of The Lean Six Sigma Improvement Journey Book
- Downloadable Green Belt project Tools and Templates
- Downloadable guide on using Excel to understand process data
- Lean Six Sigma Project Guide
- Project Storyboard Guide

British Quality Foundation Lean Six Sigma Green Belt exam

## **Follow-on Options**

- British Quality 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 for Lean Six Sigma Projects
  - Lean Six Sigma for Innovation and Design (Design for Six Sigma)
  - Advanced Green Belt
  - Black Belt

## **Delivery Options**

We offer the blended programme for in-company cohort groups and as an open-enrolment programme.

#### **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.