PURPLE GRIFFON
The IT Service Management Training & Consultancy Specialists

Course Title: Lean Six Sigma Black Belt	**Course Duration**: 10.0 Days
Exam: Included	**Exam Type**: Proctored Exam
Qualification: Lean Six Sigma Black Belt Certificate	

Course Syllabus

Our Lean Six Sigma Black Belt training course is delivered as two five-day sessions over two weeks:

Week One (Five Days)

- Review of Green Belt learning
- Project selection
- Project risks
- Team leadership
- Force Field Analysis

Define

- Quality Function Deployment

Measure

- Balanced scorecards
- Introduction to Minitab
- Basic statistical concepts
- Central limit theorem
- Measurement Systems analysis (MSA)
- Continuous data MSA
- Discrete data (MSA)
- MSA demonstration
- Standardised Normal distribution
- Capability Cp and Cpk
- Process Efficiency calculations

Analyse

- Graphs using Minitab
- Statistical tests using Minitab
- Hypothesis testing
- Continuous data
- One sample t-test
- Two sample t-text
- Homogeneity of variance
- Analysis of variance

- Discrete data
- One and two proportion tests
- Chi-squared
- Non-Normal data
- Mann Whitney U
- Moods Median

Week Two (Five Days)

- Review of week one

Analyse (continued)

- General Linear models
- Linear Regression
- Multiple Regression
- Lean Analysis
- Spaghetti Diagrams
- SMED
- TPM

Improve

- Kaizen
- Standard Work
- Problem Solving
- Handling conflict
- Coaching
- Creativity
- Prioritisation methods
- Design of Experiments
- Full factorial experiments
- Fractional factorial experiments

Control

- Control Charts
- Deploying Continuous Improvement

Examination

Course Overview

Lean and Six Sigma are both proven business Improvement approaches which provide businesses with the ability to maximise customer, employee and shareholder value by minimising process variation and waste.

Our ten-day Lean Six Sigma Black Belt training course will enable you to become self-sufficient process improvement practitioners with the capability to analyse opportunities and deliver solutions.

Our Lean Six Sigma Black Belt training course provides experienced Lean Six Sigma Green Belt's with the necessary tools and techniques to manage improvement resources to deliver major projects.

Course Learning Outcomes

Our Lean Six Sigma Black Belt training course will teach you:

- Scope improvement projects including the development of charters.
- Determining and managing stakeholder requirements.
- Further develop their in-depth understanding of qualitative and quantitative tools to measure and analyse business process.
- Apply lean principles to determine customer value, determine value streams, understand flow develop pull systems and ensure perfection.
- Identify, quantify and select the most suitable solutions.
- Control business processes and understand process change through the use of SPC and change management skills
- Manage and mentor Green Belt projects and resources

Audience

Our Lean Six Sigma Black Belt training course is suitable for:

- Managers
- Internal Consultants
- Change Agents
- Project Managers
- Team Leaders
- Team Members Involved In Lean Six Sigma Projects

Entry-Level Requirements

You must have completed our five-day Lean Six Sigma Green Belt training course

You should ideally, have a project identified to complete post-training. This is required for accreditation

Recommended Reading

- Lean Six Sigma & Minitab - Quinten Brook
- Statistics Without Tears - Derek Rowntree

What's Included

Our Lean Six Sigma Black Belt training course includes the following:

- Full Materials
- Course Workbook
- Lean Six Sigma Black Belt Examination

Exam Information

Lean Six Sigma Black Belt Examination:

The Lean Six Sigma Black Belt examination will be taken on the last day of week two of our Lean Six Sigma Black Belt training course. It is open book. If you fail the exam (70% pass mark), you will be able to re-sit the examination. Data analysis questions will be used during both weeks to assess competency in statistical analysis using Minitab.

What's Next

Our three-day Agile Project Management Foundation training course teaches you how to lay the foundations for successful Agile projects and manage an Agile project from start to finish.

Our Agile Project Management Foundation training course will detail the different management styles needed for successful Agile projects.

Additional Information

Lean Six Sigma is a pragmatic approach that emphasises the importance of focusing on delivering what the customer wants by utilising the skills and knowledge of the employees.

Improvement projects aim to reduce the cost of poor quality, increase process capability, minimise process cycle time and remove waste to deliver what the customer wants, ultimately resulting in increased customer satisfaction.