

## **Lean Six Sigma – Green Belt**

This internationally recognised training course will help you to improve the efficiency of your organisation and save you \$\$\$\$\$. No matter your industry, Lean Six Sigma (LSS) will help you to deliver results and dramatically improve your business. Lean Six Sigma is a proven methodology that focuses on the elimination of waste from processes; reduction in process variation; root cause identification; and efficiency and productivity improvement.

The 5-day **LSS Green Belt** training program will introduce you to a range of tools and techniques that form part of the DMAIC process (Define, Measure, Analyse, Improve and Control) to improve your business; help you make data based decisions, and will equip you to complete a full Green Belt level project.

At the completion of the program, participants who wish to attain certification, may do so through the IASSC (International Association of Six Sigma Certification)

Through the program, you will use many real life examples, and will practice using Sigma XL (Statistical Data Analysis Package)

Training certified by IASSC (International Association of Six Sigma Certification)

## **Target Audience**

Engineers, Finance, Insurance, Human Resources and more – anyone who works with processes that require improvement!

**Green Belt** – participants who are seeking detailed Lean Six Sigma expertise, and want a thorough process improvement methodology, to be implemented immediately in a workplace project.

## **Course Outline – Green Belt**

### Day 1 - Define Phase

- Understanding Six Sigma
- Six Sigma Fundamentals
- Selecting Projects suitable for LSS
- Elements of Waste and how to remove them

### Day 2 - Measure Phase

- Process Discovery (Process Mapping)
- Six Sigma Statistics (understanding data)
- Measurement System Analysis (gaining assurance in the quality of your data)
- Process Capability (how capable is your process, and how much improvement is required)

### Day 3 - Analyse Phase

- “X” Sifting (how to determine which inputs are having the greatest impact on your process)
- Inferential Statistics (understanding what sample data is telling you about the population)
- Introduction to Hypothesis Testing (proving or disproving the impact of a process input)
- Hypothesis Testing in detail for different data types

### Day 4 - Improve Phase

- Process Modeling Regression (creating a simple mathematical relationship between process inputs and outputs)
- Advanced Process Modeling (creating complex mathematical relationships between process inputs and outputs)
- Designing Experiments (how to effectively design an experiment to test your potential solutions)

### Day 5 - Control Phase

- Advanced experiments
- Advanced Capability Analysis
- Lean Controls (sustaining your solutions using lean techniques)

- Defect Controls (preventing defects from occurring, or managing their impact)
- Statistical process control (monitoring your solution)
- Six Sigma Control Plans (sustaining your solution using change management principles)

### **Green Belt Course Objectives**

- Knowledge and understanding of the DMAIC process (Define, Measure, Analysis, Improve, Control)
- Ability to define a problem well and engage stakeholders
- Ability to conduct appropriate process mapping and identify areas for improvement
- Introduction to Root Cause Analysis techniques to help describe your process
- Ability to determine the key inputs that are impacting on a problem and causing process variation
- In-depth data analysis and graphing techniques
- Ability to use Sigma XL (Statistical Data Analysis software)
- Ability to prove or disprove the impact that various inputs may be having on your problem
- Development of mathematical models to show the relationships between process inputs and outputs
- Development of experimentation plans to enable identification of the optimum solution
- Determine and Implement a solution that is sustainable and meets the needs of the business
- Knowledge and understanding of effective implementation and control plans

### **Green Belt Outcomes**

- Ready to sit for Green Belt exam through IASSC
- Participant is ready to start a LSS project in their workplace

### **Learning Investment**

Green Belt Public Course - \$3000 per participant

Contact Ross Blaikie for available dates – 0466 345 381 [ross@rossblaikieconsulting.com.au](mailto:ross@rossblaikieconsulting.com.au)

In-house training - \$2000 per day for 3 - 10 participants