PROFESSIONAL DEVELOPMENT TRAINING

# Lean Six Sigma Green Belt Training Upgrade from Yellow Belt

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REQUEST QUOTE

2.0 DAY COURSE

**This Six Sigma Green Belt upgrade course is designed for people who have completed the PD Training Yellow Belt course or an equivalent course with another provider.**

**The PD Training Yellow Belt Training provided you with the fundamental skills in the Define, Measure and Control steps of the DMAIC process. This upgrade to Six Sigma Green Belt course provides you with significant more in-depth knowledge in the Analyse and Improve phases, and empowers you with the ability to really drive improvements in your workplace.**

**This highly significant and lively course is available now throughout New Zealand, including Auckland, Christchurch or Wellington.**

### What You'll Gain:

Prior to accepting your enrolment, PD Training will provide you with an IASSC Practice Test to confirm your existing knowledge, and if accepted, we will provide you with the IASSC authorised Green Belt training materials a week before the course runs, so you can review the materials beforehand and pick up the training without missing a beat.

This upgrade course includes days 4 and 5 from the complete 5-day Green Belt course. It picks up from where the Yellow Belt training left off.

By moving up from the Yellow Belt to Green Belt, you will learn and develop substantial skills in the ***Analyse*** and ***Improve*** phases of DMAIC.

## Outcomes

During this course, participants will enhance their skills above the Yellow Belt level and develop:

- Ability to use a structured approach to process improvement
- Ability to use all steps of DMAIC *(with a focus on Analyse and Implement)* methodology
- Skill to achieve sustainable quality improvement through process improvement
- Understanding of the tools of process discovery

- Understanding of variation in processes
- Skill to reduce variation in processes and achieve predicted outcomes
- Ability to identify, measure and analyse process potential
- Usage of inferential statistics
- Usage of hypothesis testing
- Understanding when to use which Six Sigma methodology
- Ability to use Capability Analysis to control processes
- Knowledge of the interdependence of Lean tools
- Skill to prevent, identify and control defects
- Understanding and use of statistical process control
- Skill to train, document, monitor, respond, and align systems
- Skill to provide sustainable and cost-effective improvement in processes

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# Modules

### Lesson 1: Brief review of Yellow Belt content (Define Phase)

### Lesson 2: Brief review of Yellow Belt content (Measure Phase)

### Lesson 3: "X" Sifting (Analyse Phase Module 1)

LSS Green Belt Analyse Phase - The Analyse Phase of the DMAIC methodology is constructed to introduce important Lean Six Sigma tools for isolating critical factors.

- Perform a Multi-Vari Analysis
- Interpret and a Multi-Vari Graph
- Identify when a Multi-Vari Analysis is applicable
- Interpret what Skewed data looks like
- Explain how data distributions become Non-normal when they are really Normal

### Lesson 4: Inferential Statistics (Analyse Phase Module 2)

- Explain the meaning of the term "Inferential Statistics".
- Describe the basic tenets of the Central Limit Theorem.
- Describe the impact of sample size on your estimates of population parameters.
- Explain Standard Error

### Lesson 5: Intro to Hypothesis Testing (Analyse Phase Module 3)

- Articulate the purpose of Hypothesis Testing
- Explain the concepts of the Central Tendency
- Be familiar with the types of Hypothesis Tests

### Lesson 6: Hypothesis Testing Normal Data Part 1 (Analyse Phase Module 4)

- Determine appropriate sample sizes for testing Means
- Conduct various Hypothesis Tests for Means
- Properly Analyse Results

### Lesson 7: Hypothesis Testing Normal Data Part 2 (Analyse Phase Module 5)

- Be able to conduct Hypothesis Testing of Variances
- Understand how to Analyse Hypothesis Testing Results

### Lesson 8: Hypothesis Testing Non-Normal Data Part 1 (Analyse Phase Module 6)

- Conduct Hypothesis Testing for equal variance
- Conduct Hypothesis Testing for Medians
- Analyse and interpret the results

### Lesson 9: Hypothesis Testing Non-Normal Data Part 2 (Analyse Phase Module 7)

- Calculate and explain test for proportions
- Calculate and explain contingency tests

### Lesson 10: Wrap Up & Action Items (Analyse Phase)

### Lesson 11: Process Modeling Regression (Improve Phase Module 1)

LSS Green Belt Improve Phase - The Improve Phase of the DMAIC methodology is constructed to introduce important Lean Six Sigma tools for properly controlling solutions.

- Perform the steps in a Correlation and a Regression Analysis
- Explain when Correlation and Regression is appropriate

### Lesson 12: Advanced Process Modeling (Improve Phase Module 2)

- Perform Non-Linear Regression Analysis
- Perform Multiple Linear Regression Analysis (MLR)
- Examine Residuals Analysis and understand its effects

### Lesson 13: Designing Experiments (Improve Phase Module 3)

- Determine the reason for experimenting
- Describe the difference between a physical model and a DOE model
- Explain an OFAT experiment and its primary weakness
- Shown Main Effects Plots and interactions, determine which effects and interactions may be significant
- Create a Full Factorial Design

### Lesson 14: Wrap Up & Action Items (Improve Phase)

## Lesson 15: Brief review of Yellow Belt content

**Talk to our expert team**

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