PROFESSIONAL DEVELOPMENT TRAINING

# Lean Six Sigma Yellow Belt Training - Signature Series

1300 121 400

REQUEST QUOTE

3.0 DAY COURSE

**The Lean Six Sigma Yellow Belt program will empower you to contribute to any continuous improvement (CI) initiative.**

**Throughout this three-day workshop you will learn both techniques and strategies and how to put them into practice using a range of activities and case studies. The course includes 21 hours of structured learning, complemented by approximately six hours of self-directed study to reinforce understanding and application of key concepts, bringing total learning time to around 27 hours.**

**The tools you master will prepare you for the exam and empower you to support continuous improvement projects in your workplace. Lean Six Sigma is the most highly regarded CI and Management System ever developed - Yellow Belt Certification is your ticket to enter the world of CI with credibility, respect and ability.**

**You'll be guided by Australia's leading Lean Six Sigma trainers, gaining the tools, templates, and knowledge to successfully drive process improvement and operational excellence within your workplace.**

**Attend a course today throughout Australia including: Brisbane, Sydney, Melbourne, Canberra, Adelaide and Perth.**

## What You'll Gain:

The PD Training Yellow Belt Training course is a practical training experience that includes the use of many LSS tools and techniques in a range of activities and scenarios outlined in the IASSC authorised training materials.

You will learn Lean Six Sigma theory and practice applying the techniques, so that you will be well prepared to take the IASSC exam and be ready to contribute as a respected member of Continuous Improvement (CI) Projects. Course duration is 21 hours with an additional six hours of self-study required to understand the content. Total duration is 27 hours.

The implementation roadmaps within each phase provide you with a clear path for putting into practice the problem-solving methodologies and measurement tools. Various group exercises using training activities, data sets and templates facilitate interactive group learning and collaboration.

Our expert LSS trainers look forward to welcoming you to the class and empowering you with skills and techniques you can put into practice on the job and advance your career.

**Note:** PD Training provides the Lean Six Sigma Yellow Belt training and exam preparation. Certification is awarded separately by the International Association of Six Sigma Certification (IASSC) upon passing their official exam.

# Outcomes

**After completing this course you will have learned:**

- Complete understanding of Six Sigma
- Ability to improve processes for enhanced product quality
- Understanding of the tactical and strategic aspects of Lean Six Sigma
- Understanding of process capability
- Skill to Define, Measure, Analyse, Improve and Control (DMAIC) processes
- Understanding of process discovery
- An accurate system of predicting outcomes, measurable and quantifiable
- Clear understanding of goals
- A highly effective methodology to improve processes drastically
- Methods to minimise variability in processes
- Capability to maximise production by fully utilising the potential of processes
- Ability to reduce waste through the identification and removal of present and potential errors
- Control over defects for their effective prevention
- Means to build strong managers and leaders
- A highly effective quality management system
- Smoother, faster and error-free processes
- Effective means to drastically increase savings through reduction in waste and improvement in processes

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# Modules

### Lesson 1: What is Quality (Introduction)

- Understand the history of quality
- Gathering the voice of the customer
- Garvin's five definitions of quality
- Definitions of quality from quality gurus
- Differences in quality between products and services

### Lesson 2: Enterprise-wide View (Introduction)

- Understand the history of continuous improvement
- Six Sigma as a Value
- Six Sigma as a Measure
- Six Sigma as a Metric
- Rolled Throughput Yield
- Six Sigma Approach
- Six Sigma Process

- Six Sigma System
- Six Sigma System

### Lesson 3: Lean (Introduction)

- Understand the history of Lean and the value it brings to an organisation
- The philosophy and goals of Lean Manufacturing
- Understand how Lean integrates with Six Sigma

### Lesson 4: Six Sigma Roles and Responsibilities (Introduction)

- Understand Six Sigma key players
- Understand team stages in six sigma projects
- Understand the different modes of team communication

### Lesson 5: Understanding the Define Phase of Six Sigma (Define Phase)

LSS Yellow Belt Define Phase - The Define Phase of the DMAIC methodology is constructed to introduce the fundamentals of Lean Six Sigma.

- Describe the two stages of the Define phase<

### Lesson 6: Six Sigma Important Stakeholders (Define Phase)

- Describe the stakeholders in Six Sigma projects
- Understand how the changeover to Six Sigma implementation affects stakeholders

### Lesson 7: Voice of the Customer (Define Phase)

- Understand the importance of the Voice of the Customer is Six Sigma projects
- Comprehending the Voice of the Customer

### Lesson 8: Critical to Quality Flowdown (Define Phase)

- Understand the definition and purpose of Critical to Quality
- Understand the Critical to Quality steps or flowdown

### Lesson 9: Selecting Six Sigma Projects (Define Phase)

- Understand the core components of project selection: Business case, Project Charter, Benefits Analysis
- Understand the components of the project charter

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

### Lesson 11: Processes and Process Characteristics (Measure Phase)

LSS Green Belt Measure Phase - The Measure Phase of the DMAIC methodology is constructed to introduce important Lean Six Sigma tools for characterising your business issues.

- Define a process

### Lesson 12: Process Maps and Flow Chart (Measure Phase)

- Understand how to create a process map
- Understand the different types of process maps
- Describe process flow metrics and how they are used

- Explain different types of processes
- Explain different process characteristics
- Describe what an X-Y Diagram or X-Y matrix is and how to construct one

### Lesson 13: Fishbone Diagram (Measure Phase)

- Understand the purpose and meaning of the Ishikawa or Fishbone diagram
- Apply the Fishbone diagram
- Apply non-probability sampling strategies
- Know how to calculate and determine sample size for continuous and discrete data

### Lesson 14: Failure Mode and Effects Analysis

- Explain the of conducting FMEA and its various elements
- Explain and calculate Risk Priority Number
- Understand procedures involved in conducting FMEA
- Understand differences of design and process FMEA
- Explain advantages and disadvantages of conducting FMEA

### Lesson 15: Basic Statistics (Measure Phase Module)

- Explain the various statistics used to express location and spread of data
- Describe the characteristics of a Normal Distribution
- Explain the measures of dispersion
- Understand and use measures of symmetry
- Explain the Central Limit Theory
- Explain frequency distribution

### Lesson 16: Measurement System Analysis (Measure Phase)

- Describe the difference between attribute and variable data
- Understand the difference between continuous and discrete data
- Understand different data collection methods

### Lesson 17: Data Integrity and Accuracy (Measure Phase)

- Describe and define data integrity and accuracy
- Understand the principles of gauge repeatability and reproducibility
- Understand the characteristics of accuracy, precision, linearity, stability and bias
- Complete a linearity example in Minitab

### Lesson 18: Process Capability Analysis (Measure Phase)

- Understand causes of variation
- Estimate Capability for Continuous Data
- Describe the impact of Non-normal Data on the analysis presented in this module for Continuous Capability
- Calculate process performance metrics

### Lesson 19: Wrap Up & Action Items (Measure Phase)

### Lesson 20: Graph and Data Analysis (Analyse Phase)

- Construct a scatter diagram

- Understand the principles of a Pareto chart
- Construct a Pareto chart testing proportions against each other and against a specified value

### Lesson 21: Five Whys (Analyse phase)

- Explain the 5 Whys process
- Explain the advantages and disadvantages of the 5 Whys process

### Lesson 22: Non-Value Added Activities (Analyse Phase)

- Understand the seven types of process waste
- Understand the difference between value and non-value added activities
- Identify non-value added activities from process maps

### Lesson 23: Wrap Up & Action Items (Analyse Phase)

- Understand the seven types of process waste
- Understand the difference between value and non-value added activities
- Identify non-value added activities from process maps

### Lesson 24: 5S (Improve Phase)

- Understand the 5 concepts in the 5S model
- Understand the effect of 5S on improvements

### Lesson 25: Kanban and Poka-Yoke (Improvement Phase)

- Understand the concept of Kanban and the Push vs Pull system of production
- Understand the concept of poka-yoke (mistake proofing)

### Lesson 26: Maintain Controls (Control Phase)

- Understand the benefits of a control plan and how to create one
- Understand the elements of a control plan: Documentation plan, monitoring plan, resource plan, a training pan, aligning systems and structures

### Lesson 27: Documentation Plan

- Understand the importance of maintaining documentation on projects
- Lessons learned and the benefits of them

### Lesson 28: Wrap Up & Action Items (Control Phase)

Talk to our expert team

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