

GMP Training Systems, Inc.

Creators of the GMP Ready-to-Use Training System™

Lean Six Sigma and Kaizen Boot Camp

Learning Objectives

Upon completion of this workshop, participants will be able to:

- Understand Lean Six Sigma techniques and tools for process improvement.
- Have a thorough understanding of the breadth and scope of Lean Six Sigma (LSS).
- Interpret Six Sigma **PHILOSOPHIES** in order to apply them to real-world situations they are likely to encounter.
- Develop a personal commitment to the **SEVEN PROBLEM SOLVING TOOLS** and **PROCESS IMPROVEMENT TOOLS**.

Who should attend

This workshop is designed for anyone whose responsibilities require a comprehensive understanding of the basic concepts of Lean Six Sigma (LSS) to reduce waste, reduce defects and reduce variations in systems and processes. The concepts of Six Sigma may seem complex to many. However it will be broken down into simple logical steps that can offer companies huge rewards resulting in fewer mix-ups and errors and greater profits.

Workshop instructors

Our instructors all have management experience in diversified industries using Lean Six Sigma. They have first-hand experience dealing with the day-to-day challenges of maintaining an efficient workplace. Our instructors work hard to keep each participant engaged in active learning throughout the entire workshop. Ramesh Lohia, Founder and President of Sigma Kaizen Solutions, is the instructor for this course.

Our approach

Our workshops are hands-on and practical, not theoretical. We use proven adult learning techniques, which includes a diverse array of group discussion, lecture, video, demonstrations, and small group interactive activities. You will also learn what is common in Yoga, Six Sigma and Warrior concepts.

At the conclusion of the workshop, an examination will be conducted. Certificates of Completion will be awarded - one for Lean Six Sigma, one for Kaizen, and one for Six Sigma White Belt.

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Day One

Exploration of Lean Six Sigma from a profit increase viewpoint. Small group exercises are used throughout the session to enhance learning. Participants will view videos of how the progress has been made since 1980 to present. These small groups will develop strategies to deal with each observation and more importantly, identify what could have been done to prevent the observation in the first place.

- How and why Lean Six Sigma (LSS) makes Good Business Sense - Define, Measure, Analyze, Improve and Control (DMAIC)
- The history and evolution of LSS.
- The critical components of Six Sigma DMAIC Model with particular focus on various aspects of a business including Documentation and Records control.
- KAIZEN events will be conducted for each candidate's specific industry and developing recommendations to prevent errors. Each candidate is encouraged to bring a minimum of two real problems to the workshop without divulging proprietary information.
- The concept of operating in a "state of control" by exploring Six Sigma Philosophies. PDCA (plan-do-check-act or plan-do-check-adjust) which is an iterative four-step management method used in business for the control and continuous improvement of processes and products. It is also known as the Deming circle/cycle/wheel, Shewhart cycle, control circle/cycle, or plan-do-study-act (PDSA).
- Contributions of the Masters of Quality
 - W. Edwards Deming - improved quality lowers costs and Deming's 14 points for management.
 - Armand V. Feigenbaum - devised the concept of Total Quality Control, later known as Total Quality Management (TQM).
 - Kaoru Ishikawa – proposed cause and effect diagram (also known as fishbone diagram) that is used in the analysis of industrial process.
 - Joseph Moses Juran- remembered as an evangelist for quality and quality management.
 - Walter Andrew Shewhart - sometimes referred to as the father of statistical quality control and the Shewhart cycle.
 - Genichi Taguchi - His concepts pertaining to experimental design, the Taguchi loss function, and the reduction of variation have influenced fields beyond product design and manufacturing.

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Day Two

A hands-on examination of the Problem Solving and Process Improvement tools.

SEVEN PROBLEM SOLVING TOOLS:

- Flowchart - Basic tool for characterizing a process.
- Check Sheet - The check sheet is a form (document) used to collect data in real time at the location where the data is generated. The data it captures can be quantitative or qualitative
- Cause-and-Effect Diagram – Also known as fishbone diagram helps to visually display the many potential causes for a specific problem.
- Pareto Chart - A Pareto chart is used to graphically summarize the relative importance of between groups of data.
- Control Charts - Control charts, also known as Shewhart charts (after Walter A. Shewhart) or process-behavior charts which are used to determine if a manufacturing or business process is in a state of statistical control.
- Histograms – A graphical representation of the distribution of data.
- Scatter Diagrams - A scatter plot, scatterplot, or scattergraph is a type of mathematical diagram using Cartesian coordinates to display values for two variables for a set of data.

PROCESS IMPROVEMENT TOOLS:

- Root Cause Analysis –It is a method of problem solving that tries to identify the root causes of faults or problems. It encompasses a Seven-step-problem-solving model. We will also discuss 'The 5 Whys' - an iterative question-asking technique used to explore the cause-and-effect relationships underlying a particular problem.
- Failure Mode and Effects Analysis (FMEA) – A systematic technique for failure analysis.
- Statistical Process Control (SPC) charts helps quality control. It includes control charts with a focus on continuous improvement.

Examination for Lean Six Sigma, Kaizen, and Six Sigma White Belt will be given.