KAVON International, Inc.

COURSE DESCRIPTION

Lean Six Sigma Green Belt Certification

Description

Smoother processes, greater efficiency and cost savings are just a few of the advantages that will make your organization more competitive when you implement Lean and Six Sigma continual improvement principles. Lean techniques eliminate wasteful activities, while Six Sigma is a disciplined method for meeting customers' expectations and eliminating defects in any process.

Investing in Lean Six Sigma training is the beginning of a new way of doing business. A commitment to implementing these methodologies and tools creates a culture of operational excellence. In the end, you'll achieve bottom-line results from the projects your Green Belts undertake and you'll transform your organization into a more efficient, customer-focused one.

Lean Six Sigma Green Belt Training and Certification offers the unique approach of weaving both Lean and Six Sigma methodologies into a seamless certification that can help you achieve substantial improvements in your organization.

The Lean Six Sigma Green Belt curriculum is structured to allow students and employers maximum flexibility in obtaining the Lean Six Sigma Green Belt certification. The Green Belt program is held one week each month for two months.

For Lean Six Sigma certification, each student must complete an individual project, which will contribute significant results to his/her sponsoring organization.

Learning Objectives

The overarching learning objective of this course is to develop a comprehensive set of skills, which will allow you to effectively function as a change agent within an organization. Upon completion of this training course, participants will be able to:

- Relate Lean Six Sigma concepts to the overall business mission, vision, objectives, goals, and tactics.
- Understand and communicate using Lean Six Sigma concepts.
- Think about your organization as a collection of processes, with inputs and activities that determine the output and measures that assess effectiveness.
- Understand and apply the five step DMAIC model as a roadmap to organize process improvement projects.
- Understand the role of teams to achieve process improvements.
- Understand the difference between the Voice of the Process (VOP) and the Voice of the Customer (VOC) and the role they play in analyzing business processes.
- Identify the eight major forms of waste and use Lean concepts and tools to eliminate that waste.
- Understand variation in processes including patterns and measures of variation.
- Determine what to sample, sampling frequency, and sample size.
- Understand measurement error and its impact on the collection of data.
- Understand common causes of variation and special assignable causes of variation.

- Understand control charts (components, interpretation, and use in decision-making).
- Monitor and control variation with variable and attribute control charts.
- Describe basic process capability.
- Understand standard deviation.
- Identify common SPC challenges and how to avoid them.
- Use Minitab Statistical software to analyze data.
- Use Quality Companion software to manage and document Lean Six Sigma projects.
- Certification as a Lean Six Sigma Green Belt.

Topics Covered

Week One

- Introduction to Lean thinking
- Basics of Six Sigma Methods and Quality
- Using DMAIC (Six Sigma methods) to understand cause and effects relationships
- Team building (TOPS method)
- Identification of high value projects
- Introduction to Minitab and Quality Companion software
- Understanding measurement system analysis
- Process capability
- Six Sigma project simulation (helicopter)

Week Two

- Student project reviews
- Application of Lean methods (flow, 5S, Visual Management and SMED)
- Using Kappa studies to determine attributes agreement
- Creating change through the use of appropriate performance metrics
- Using statistical methods for process control
- Using Kaizen tactics for rapid project breakthroughs
- Sustaining the gains
- Introduction to Design of Experiments (DOE)
- Project simulation (catapult)

Who Should Attend

Key candidates for Lean Six Sigma training and certification are:

- Quality technicians, supervisors and managers
- Plant managers
- Directors and managers of engineering
- Vice presidents or managers of customer service
- Operations managers
- Vice presidents of manufacturing
- Directors and managers of patient services
- Patient quality managers

- CFOs
- Presidents
- CEOs

Organizations in the manufacturing, health care and service-based industries, as well as in higher education, will reap significant benefits from employees attending this program.

Prerequisites

To maximize the benefit of attending Lean Six Sigma training and to continue to realize return on investment for future Lean Six Sigma projects, this course requires that each participant brings a laptop that has the current release Minitab statistical software and Quality Companion software installed.