
Lean Six Sigma Green Belt Boot Camp Workshop – Part 1

Course Content

This 3-day course focuses on fundamental Lean Six Sigma concepts and methodologies that improve and enhance manufacturing, government, non-profit, and service operational systems. It introduces the Operational Excellence culture with tools and techniques of the Lean Six Sigma management methodology. This methodology focuses on eliminating defects and reducing waste through understanding, measuring, data analysis, improving processes, and solving problems. Our Fighter Aircraft Factory Workshops allow your employees to learn and apply the Lean Six Sigma techniques and concepts.

Certification Requirements

You must bring a project for certification, and you can contact us before class to discuss it. Lean Six Sigma Green Belt Certification is achieved by writing a project report and presenting a PowerPoint presentation. The presentation is an individual effort in that you lead a group project. Since certification is achieved individually, each person must show how Lean Six Sigma concepts and techniques improved the process or solved the problem. You must pass the Lean Six Sigma Green Belt Exam with scores above 70%. Lean Six Sigma Green Belt Certification is optional.

Price: \$1,495/seat

Course Outline – Part 1

- **What is Global Excellence?**
 - A Brief History of Operational Excellence (OpEx) to Global Excellence; 8 Wastes
 - LSS & Lean Belts Roles
- **The DMAIC and Define Phase**
 - Develop Project Charter
 - Cost Benefit Analysis (CBA)
 - Critical-To-Quality (CTQ)
 - Pareto Analysis
 - 5S Visual Management Systems
 - Lean Six Sigma Design for Manufacturing
- **Measure Phase**
 - 5S Visual Management
 - SIPOC; Spaghetti Diagram; Service & Product Process Flow Charts; Value Stream Maps; Swim Lane Diagram
 - Principles of Product and Service Flow; Batch vs. One Piece Flow; Push and Pull Systems; Takt Time; JIT and Kanbans
 - Quality Improvement Approach; Total Cost of Quality; Pareto Analysis; Root Cause Analysis; Fishbone; 5-Whys; Stratification

Course available at your facility.

People learn more from doing and having fun than lecture only.

www.CaldwellLeanSixSigma.com

Lean Six Sigma Green Belt Boot Camp Workshop – Part 2

Course Materials

Each participant will receive course documentation in pdf format. A trial version of Minitab is needed for classes. The Lean Edit, the free 30-day demo software, is at www.LeanEdit.com.

Course Goals

- Learn the Lean Six Sigma concepts and techniques to improve operational systems in non-profit, business, manufacturing, service, and government organizations.
- Learn how to use statistical data to solve problems and improve processes
- To become a Certified Lean Six Sigma Green Belt

Course Interactive Physical Simulation

Each participant will participate in an interactive physical simulation of product flow with the Fighter Aircraft Factory Workshop. We have fun team exercise, learning about product flow, bottlenecks, and throughput improvements.



Course Outline – Part 2

- **Analyze Phase**
 - Rapid Changeover Setup Reduction; Lean Edit Free Software
 - Basic Statistical Concepts
 - Normal Distribution
 - Standard Deviation
 - Histogram; Boxplot
 - Scatter Plot;
 - Measurement Systems Application
- **Improve Phase**
 - Lean Six Sigma Comparison Analysis
 - Standardization
 - Implementation Plan
 - Verifications and/or Qualifications Testing
 - Control Plan
- **Control Phase**
 - Implement Control Plan
 - Conduct Verifications and/or Qualifications Testing
 - Capture Improvement Data
 - Audit Improvement
 - Sustain Improvements
- **Lean Six Sigma Green Belt Exam**

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