CLS | Learning Solutions

Why Learn Six Sigma Green Belt ?

Learn all aspects of the Lean Six Sigma Method including competence in subject matters contained within the phases of Define, Measure, Analyze, Improve and Control (DMAIC) as defined by the Lean Six Sigma Green Belt Body of Knowledge.

Audience Profile :

- Engineers / Professionals / Executives who want to understand Six Sigma as a management tool for process and performance improvement at their work place
- Quality and Process Managers, Engineers and Executives who need to gain knowledge of Six Sigma in process / quality improvements
- Production Managers, Production Supervisors and Customer Service Managers
- Consultants who want to add Six Sigma Green Belt in their service offerings and help their customers implement it.

Prerequisites:

- There are no prerequisites required for the Certified Lean Six Sigma Green Belt.

Course Overview:

- The Certified Lean Six Sigma Green Belt is a professional who is well versed in the core to advanced elements of Lean Six Sigma Methodology, who leads improvement projects and / or serves as a team member as a part of more complex improvement projects lead by a Certified Black Belt, typically in a part-time role.
- A Certified Lean Six Sigma Green Belt understands how to implement, perform, interpret and apply Lean Six Sigma at a high level of proficiency.
- A lean company is disciplined and dedicated to achieving optimum performance with the lowest or least amount of effort and energy. Lean is generally referred to as a manufacturing or production improvement methodology.
- As a term in business, it has a broad-based customer focus that concentrates on providing more to the customer.
- It does this by supplying the product that is just what the customer needs, when needed, in just the right amounts and for the right price, using the minimum materials, equipment, workspace, labor resource and time.
- The goal is to teach you the key competencies required to function in the role of a Six Sigma Lean Green Belt.

Lean Six Sigma Green Belt Outline:

- Measures of Capability (Minitab)
- Capability Formula
- Capability Steps
- Attribute Capability Steps
- Attribute Capability Example
- Inferential statistic
- Central limit theorem (Minitab)
- Sampling (Minitab)
- Classes of data Distributions-
- Analyze Data (to find sources of variation)
- Mukti-Vari study (Minitab)
- Analysis of Process & Identify root causes
- Hypothesis testing (Verify root causes)
- Hypothesis test (Normal data)
- Mean – 1-sample t test (Minitab)
- Mean – 2-sample t test (Minitab)
- Mean – Paired t test (Minitab)
- Mean – one way anova (Minitab)
- Variance – 1 sample variance (Minitab)
- Variance – (test of equal Variance) (Minitab)
- Hypothesis test (Non Normal)
- Variance –(Test of Equal Variance) (Minitab)
- Median – 1 sample Sign Test (Minitab)
- Median – 1 sample Wilcoxon (Minitab)
- Median – 2 samples – Mann-Whitney (Minitab)
- Median – >2 samples – Mood's Median Test (Minitab)
- Median – >2 samples – Kruskal-Wallis test (Minitab)
- Hypothesis test (Non-Normal) attribute
- sample Proportion (Minitab)
- sample Proportion (Minitab)
- more than 2-sample Proportion (Minitab)
- Process modeling and regression
- Simple Regression (Minitab)
- Data transformation (Minitab)
- Multiple Linear Regression (Minitab)
- What is a mixture design
- Brainstorming to create solutions.
- Visual management VM
- Testing the solutions and Select the best solution.
- Ideas Prioritization
- Cost Benefit Analysis
- Pareto priority index
- FMEA Workshop (Discussed before)
- Design of experiments (DOE)
- Implement the solution (Action plan).
- Standardization of process
- Statistical Process Control SPC
- Control charts minitab