Six Sigma Green Belt

Course Description

This course provides a working knowledge of the varied aspects of Six Sigma, Lean and Process Control initiatives, while preparing Green Belts for advanced studies in more specialized topics within the subject area. Green Belts will increase their knowledge and use of improvement tools.

Course Objectives

By the end of this course, you should be able to:
1. Lead a Team, using the DMAIC process to solve a problem
2. Use Statistical tools to analyze data and prove or disprove a hypothesis
3. Understand the difference between tools, to select and use the appropriate one(s)
4. Apply Lean to solve problems encountered in business settings
5. Train White and Yellow Belts to strengthen your own knowledge of these tools and concepts.
6. Provide project updates and presentation of results to management with associated savings

Reading Material

This course recommends *6 Sigma Basic Steps & Implementation* by Fred Soleimannejed. You will be learning from viewing videos, using software (trial-license provided) and reading from different websites and handouts.

Course Outline

Section 1: White Belt
Section 2-6: Yellow Belt

Section 7: Introduction – Green Belt
      GB1 – Green Belt Program

Section 8: Six Sigma – GB
      GB2 – Project Selection
      GB3 – C & E Matrix
      GB4 – FMEA
      GB5 – Team Meetings
      GB6 – Presentation Skills
      GB7 – Cost Savings
      GB8 – Control Plans

Section 9: Process Control – GB
      GB9 – Intro to Minitab

GB10 – MSA – Gauge R&R
GB11 – MSA – KAPPA
GB12 – Confidence Intervals
GB13 – Hypothesis Testing
GB14 – t-Tests
GB15 – ANOVA
GB16 – Chi-Square
GB17 – Correlation & Regression
GB18 – Capability Studies
GB19 – Central Limit Theorem
GB20 – Sampling
GB21 – Multi-Vari

Section 10: Lean – GB
      GB22 – Quick Change Over
      GB23 – Kanban
      GB24 – Transactional Enhancements

Section 11: Green Belt Certification

Green Belt Certifications are awarded to individuals who pass (70% minimum) the Final Exam and successfully complete a minimum of one project. Projects are graded (pass/fail) within a week of submission to: HerbRobbins@Lean2020.com