

Six Sigma Green Belt Certification

Description

Six Sigma is a disciplined, data-driven methodology for reducing variation in any process. The Six Sigma methodology--driven by the DMAIC (define, measure, analyze, improve, control) process--is executed by Six Sigma green belts, Six Sigma black belts, and overseen by Six Sigma master black belts. Green belt training participants receive a subset of the more advanced black belt training course, with an emphasis on developing a structured problem-solving strategy for addressing business improvement projects by using intermediate quality tools within the Six Sigma methodology.

Objectives/Topics

- Introduction to Six Sigma history, applications, benefits, and the DMAIC methodology
- Define phase
 - Define tools- matrix diagrams, work breakdown structures, pareto diagrams, histograms, process mapping, value stream mapping, flow charts, trend charts, financial analysis, and the supplier-input-process-output-customer (SIPOC) technique
 - Project selection tips
- Measure phase
 - Measuring approaches- house of quality, teams in action, process baseline definition, benchmarking
 - Tools for measuring- basic statistics, box whisker plots, cause and effect diagrams, check sheets, interrelation diagrams, process capability and performance indices, goodness-of-fit tests
 - Measurement system analysis- gage stability, linearity, repeatability & reproducibility analysis
- Analyze phase
 - Statistical analysis methods- analysis of variance (ANOVA), design of experiments (DOE)
 - Lean enterprise methods
 - Statistical analysis with Minitab software
- Improve phase
 - Cost of poor quality
 - Tools used to improve- pareto & prioritization matrix, failure mode and effect analysis (FMEA), process decision program charts (PDPC)
 - Preventing failures
- Control phase
 - Control tools- statistical process control (SPC) charts, process capability studies
 - Maintaining improvements- measuring and realizing bottom line impact, applying knowledge elsewhere

Simulations/Exercises/Application Techniques

In addition to lecture material, this course utilizes various forms of hands-on simulations, exercises, and case studies to demonstrate Six Sigma concepts. The course also utilizes and demonstrates the use of Minitab software applications for statistical analysis.

Certification

This course includes a Six Sigma green belt certification exam, to be administered on the last day of the training.

Course Length

40 hours

Class Size

6 to 18 participants

Cost

- \$25,000 for entire class (If you would like to book an entire class, ATN can schedule to your convenience.)
- \$2400 per person for open enrollment