

Transactional Six Sigma Black Belt Workshop Details

Description

This unique training program provides the skill sets you will need to apply Six Sigma continual improvement methods in a service or transactional business environment. This course introduces Six Sigma tools and methods and shows application to transactional service based business in several exercises and case studies. Project assignments between sessions require you to apply what you learn. During this program, you will be required to identify, define, and formally present one Black Belt project. Upon successful mastery of the Black Belt course material the student will earn a certificate of successful completion of the Black Belt course. The Black Belt project should be completed within one year of completing training. **Duration - 3 weeks.**

Goal

You will learn the advanced problem-solving skills including:

- ANOVA analysis
- Design of Experiment
- Binary Logistic, Simple and Multiple Regression
- Monte Carlo Simulation
- Voice of Customer analysis
- Graphical Analysis and more!

You will learn how to use these tools to measure a process, validate the measurement system, analyze the results, develop process improvements, and quantify the resulting savings.

Outline / Topics

Week One: Define & Measure

- Six Sigma Overview of DMAIC
- The Hidden Factory
- Project Scoping and Selection
- Process Mapping
- Affinity Diagrams
- Quality Function Deployment
- Identifying process variables
- Measurement Systems Analysis
- Failure Mode and Effect Analysis
- Advanced Excel Tips
- Introduction to Minitab
- Change Management

Week Two: Analyze & Improve

- Capability Analysis
- Verifying the Relation Between Xs to Y including:
 - Graphical Analysis
 - Hypothesis Testing
 - Regression
- Project Updates

Week Three: Control

- DOE including:
 - Full and Fractional Factorial Designs
 - Planning for DOE
 - Catapult Exercise
- Monte Carlo Simulation
- Statistical Tolerancing
- Implementing Solutions
- Statistical Process Control
- Risk Management
- Mistake Proofing
- Financial Impact
- Final Project Review
- Black Belt Certification Options
- Project Updates

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Results

Upon successful completion of the training, participants will:

1. Be able to use the comprehensive tools and methods of Six Sigma
2. Have applied various Six Sigma concepts/tools to their individual Six Sigma DMAIC Projects.