Who Should Attend

This course is for: senior level decision makers, general managers, supervisors, group leaders, quality managers, engineers and technicians, process engineers, and any discipline that wants to apply the Six Sigma methodology to eliminate waste, reduce inventory, improve processes, increase throughput and improve bottom-line financial results.

Meet Our Trainer



Richard Titus, Ph.D. Titus Consulting

Richard is a Master Black Belt who spent nearly 20 years at Ingersoll-Rand in a variety of positions ranging from operations management, information systems, materials management, manufacturing engineering, design engineering, and more. Dr. Titus was certified as a Black Belt and Master Black Belt by Six Sigma Qualtec. He completed executive training with the Mahler Institute, Demand Flow Technology training at the John Costanza Institute of Technology and completed Lean

Training with Six Sigma Qualtec and is a certified nuclear auditor and a certified trainer for DDI. Dr. Titus earned a B.S. and M.S. in Engineering from Lehigh University and has been a lecturer or adjunct faculty member with Lehigh's College of Business since 2000. He earned his Ph.D. in Industrial Engineering from Penn State University in May 2019 focusing his research on supplier selection. Dr. Titus has supported over 350 Lean Six Sigma projects in over 50+ companies resulting in over \$50 million dollars of real savings.

Funding subsidies may apply. Please contact Diane Lewis at (610) 628-4578 or email her at: diane.lewis@mrcpa.org to see if you qualify.





Six Sigma Green & Black Belt Certification

The MRC Difference



Manufacturers Resource Center



7200A Windsor Drive | Allentown, PA 18106 610) 628-4640 | www.mrcpa.org





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Green Belt Certification

Cost: \$4,995

Early registration \$4,500 by 11/18/20

Full MINITAB license is required and is not included in course fee. The cost to purchase through the instructor is \$1,200 for annual license or \$2,499 for perpetual license + PA sales tax.

Tuition Includes: Up to four onsite project mentoring meetings. Mentoring sessions must be scheduled and completed within six months of the end of training.

2021 Schedule

- Week 1: January 12, 13 & 14
- Week 2: February 9, 10 & 11
- Week 3: March 11 & 12
- Week 4: April 7 & 8

8:30 am - 4:30 pm

Participants must attend all training dates because each training sessions builds upon each other. Any missed dates are the responsibility of the student to review materials prior to the next class.

Register: mrcpa.org/events

Location: MRC 7200A Windsor Drive Allentown, PA 18106

Questions? Please contact Diane Lewis (610) 628-4578 | diane.lewis@mrcpa.org

Program Overview and Objectives

Six Sigma Green Belt is designed for individuals with little or no prior experience with Six Sigma methodologies. This course is considered a "Dark Green" belt as it emphasizes statistical tools to improve performance and have the goals "stick." Objectives include:

- Demonstrate the DMAIC methodology
- Document to show progress and results
- Select and apply tools
- Collect and analyze data

Program Description

This Six Sigma Green Belt course consists of 10 classroom days and 4 individualized onsite mentoring sessions. It will provide a comprehensive overview of Six Sigma concepts, history, roles, implementation, and Green Belt statistical tools. A core part of Six Sigma Green Belt Training is :

Process Flowcharting

Measurement Systems

Analysis (Gage R&R)

Failure Mode and Effects

Analysis (FMEA)

Inferential Statistics

Process Capability

Control Charts

- Analysis of Variance
- Multiple Regression
- Hypothesis Testing
- Goodness of Fit Testing
- Distributions and Statistical Processes
- Cost Analysis and Justification
- Introduction to Design of
- Experiments Correlation and Regression

Benefits

ANOVA

After completing this course, participants will be able to create control charts, process maps, and control plans to describe Six Sigma roles within an organization, use statistical tests to improve processes, use Minitab to complete statistical analysis, and define a Six Sigma project. Typically Green Belt projects save at least \$25k to \$50k in cost savings in process improvement.

Program Overview and Objectives

Six Sigma Black Belt includes the first 10 days of Green Belt, plus 7 days of Black Belt material. We developed this format so that individuals within the same company could attend the training together. This improves the synergy within the organization. In addition to what is taught during the Green Belt days the last 7 days of Black Belt training will focus on:

- Advanced Regression and ANOVA
- Advanced Capability
- Design of Experiments
- Non-Parametric Distribution (s)
- Logistic Regression

Program Description

Designed for senior level decision makers, general managers, supervisors, and group leaders to help improve business processes and sustain quality improvements.

- Hypothesis Testing of Non-Normal Data
- Advanced Multiple Linear Regression
- Correlation
- Logistic Regression
- Design of Experiments (DOE)
- Full and Fractional DOE

- DOE Screening Designs
- DOE Split Plot Designs
- Noise and Variation Reduction in DOE
- Advanced Capability Analysis
- Improve and Control Phase Review

Benefits

After successfully completing the Six Sigma Black Belt course participants will be able to explain multiple regression, perform factorial experiments, determine size calculations needed for experiments, and describe the different types of process optimization. Typically Black Belt projects save \$50k to \$100k in cost savings in process improvement.

Black Belt Certification

Cost: \$8,495

Early registration \$7,995 by 11/18/20

Full MINITAB license is required and is not included in course fee. The cost to purchase through the instructor is \$1,200 for annual license or \$2,499 for perpetual license + PA sales tax.

Tuition Includes: Up to four onsite project mentoring meetings. Mentoring sessions must be scheduled and completed within six months of the end of training.

2021 Schedule

- Week 1: January 12, 13 & 14
- Week 2: February 9, 10 & 11
- Week 3: March 11 & 12
- Week 4: April 7 & 8
- Week 5: May 4, 5 & 6
- Week 6: June 8 & 9
- Week 7: June 22 & 23 8:30 am - 4:30 pm

Participants must attend all training dates because each training sessions builds upon each other. Any missed dates are the responsibility of the student to review materials prior to the next class.

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