



► Blended Lean Six Sigma Black Belt

A flexible, cost-effective way to become Black Belt certified.



Rising travel costs and depleted training budgets are causing many students to revise their educational goals. Unfortunately, these setbacks are occurring at the same time as demand for competent Performance Excellence practitioners is increasing. As more organizations look for ways to improve efficiency and cut costs, Lean Six Sigma Black Belts are in high demand.

That's why BMG University offers a **Blended Lean Six Sigma Black Belt** program, combining state-of-the-industry eLearning along with hands-on classroom instruction. The result is an efficient and cost-effective learning solution that offers the same revered Black Belt certification as our full-time classroom or eLearning options.

Program Description

The blended Lean Six Sigma Black Belt curriculum provides a detailed understanding of Lean Six Sigma, including the DMAIC methodology and key Lean tools. During the 15-week program, you learn how to apply a data-driven problem-solving methodology to improve critical processes within any organization. Lessons consist of 13 weeks (approximately 108 hours) of eLearning modules that concentrate on theory and methods. Two separate weeks in the classroom focus on the application of Lean Six Sigma tools and techniques to a project of your choosing.

The program is technically challenging to ensure that you gain the skills to implement solutions and produce hard financial results. You learn both the basic and advanced concepts and tools that Black Belts require to successfully identify, define, implement and close Lean Six Sigma projects. The course requires satisfactory completion of a Black Belt project, all of which is reviewed by a Master Lean Six Sigma instructor. In addition, you must pass four comprehensive exams to earn Black Belt certification.

Program Highlights

- Interactive Macromedia Flash-based lectures that parallel BMGI's industry-recognized classroom curriculum.
- A dedicated Lean Six Sigma instructor.
- Real-world case studies and examples from both manufacturing and transactional environments that enhance comprehension and understanding.
- Quizzes and exercises that reinforce learning outcomes.
- Comprehensive exams to test both academic knowledge and the practical aspects of using Lean Six Sigma.

Program Advantages

- Leverages the latest internet-based technologies to deliver an enhanced learning experience.
- Provides more classroom time for experiential learning (simulations, tool application).
- Enables you to move from topic to topic at your own pace and on your own schedule.
- Reduces the cost of Black Belt training significantly by lowering hotel, food and transportation costs.

"I like having the luxury of doing things at my own pace so eLearning is very convenient for me. I also like having the ability to review specific portions of the training to reinforce my understanding."

– Robert Gray
Senior Analyst
Business Excellence
Turner Broadcasting Systems

KEY LEARNING OUTCOMES

On completion of this course students will be able to:

- Identify opportunities for process improvement.
- Transform identified process improvement opportunities into clearly defined Lean Six Sigma projects.
- Apply statistical analysis to determine the relationship between key inputs and process outputs.
- Identify the optimal solution to a problem and the settings in the process that will yield the best performance in the future.
- Implement systems to ensure improvements are maintained for the long-term.

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Program Specifics

Who Should Attend:

Individuals who desire the technical and managerial skills of a Lean Six Sigma Black Belt. No previous Lean or Six Sigma experience required.

Course Length:

Total time is 15 weeks including 10 days in the classroom and approximately 108 hours of self-paced study.

Course Includes:

Access to BMG On;ine for one year.

Course Requirements:

Minitab statistical analysis software.

CEUs:

BMGI is authorized by IACET to offer 18 CEUs for this program.

Certification Requirements:

Completion of all assignments, a passing grade on all exams and completion of a Lean Six Sigma Black Belt project.

Minimum System Requirements:

- ❑ 333MHz CPU or faster
- ❑ 128MB of RAM
- ❑ 56K, DSL or Broadband Internet Connection
- ❑ Soundcard, speakers or headphones
- ❑ 800x600, 16-bit color monitor
- ❑ Windows 98se, NT, 2000 or XP
- ❑ Internet Explorer 6.0 or later
- ❑ Flash Player 8.0.42.0 or higher

Additional configuration settings may be needed.

“Black Belt certification has enabled me to deliver significant productivity and quality benefits to the business.”

— Bruce Meuli
Black Belt
UBS Bank

Program Agenda

This blended training program involves approximately 108 hours of study consisting of multimedia lectures, plus 10 days in the classroom. In addition, the curriculum includes exercises, quizzes, project work and exams. The target for completing the training portion of the program is 15 weeks (not including exams), although you have access to the online learning modules for one year.

► Weeks 1-7 (eLearning and Weekly Webinars)

- ❑ Introduction to eLearning Webinar Program
- ❑ Syllabus Explanation
- ❑ Expectations
- ❑ Lean Six Sigma Basics
- ❑ Introduction to Minitab
- ❑ Change Management
- ❑ Team Building
- ❑ Project Scoping
- ❑ Creating Pareto Charts
- ❑ Six Sigma Metrics
- ❑ Project Definition
- ❑ Process Mapping and C&E Tools Part 1
- ❑ 8 Types of Waste
- ❑ Value Stream Mapping
- ❑ Introduction to Statistics
- ❑ Data Collection
- ❑ Attribute and Variable MSA
- ❑ Capability Analysis
- ❑ Process Mapping and C&E Tools Part 2
- ❑ FMEA
- ❑ 5S
- ❑ Flow
- ❑ Understanding Graphs

► Week 8 (Classroom Practice)

- ❑ Define & Measure Review, Exercises and Simulations
- ❑ Expectations Review
- ❑ Syllabus/Schedule Review

► Weeks 9 - 14 (eLearning and Weekly Webinars)

- ❑ Confidence Intervals
- ❑ Hypothesis Testing
- ❑ Sample Size
- ❑ Contingency Tables
- ❑ Simple Linear Regression/Correlation
- ❑ ANOVA
- ❑ Generate Potential Solutions
- ❑ Future State Value Stream Map
- ❑ Kanban
- ❑ Mistake Proofing
- ❑ DOE Introduction
- ❑ Basic Factorial Experiments
- ❑ Fractional Factorial Experiments
- ❑ Attribute DOE
- ❑ Evaluating Solutions
- ❑ Piloting and Implementing
- ❑ Control Phase Tools
- ❑ Introduction to SPC
- ❑ Statistical Process Control
- ❑ Project Closure
- ❑ Introduction to Surveys

► Week 15 (Classroom Practice)

- ❑ Analyze, Improve and Control Review and Exercises
- ❑ DOE Presentations
- ❑ Final Report Planning
- ❑ Next Steps



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