



Lean Six Sigma Green Belt to Black Belt Upgrade

Streamlined black belt training for green belt practitioners

COURSE OVERVIEW

This course develops Lean Six Sigma (LSS) green belts into black belts who can solve more challenging problems and lead improvement teams across a wider spectrum of processes (transactional, service, manufacturing, healthcare, financial).

Unlike less rigorous courses, this course requires green belts to pass three exams and complete a workplace project before they're certified as black belts. Qualifying projects remove sources of substandard quality, streamline processes or otherwise significantly reduce costs or increase revenue.

LSS black belts are professional problem solvers and mentors. With this in mind, BMGI instructors take great care to transfer all the necessary skills that green belts will need to become effective black belts and, in some cases, fill higher-level technical or management positions.

A differentiating aspect of this course is the inclusion of creative-thinking modules that can be used when out-of-the-box solutions are needed. These creative techniques can dislodge a team's thinking when members are mired in their own assumptions and familiarity with their own processes.

Another differentiator is that BMGI master instructors are available (via phone and email) throughout the duration of this course to provide individualized coaching and mentoring as students apply their tools and skills in their home organizations.

LEARNING OBJECTIVES

Upon completion of this course, participants will be able to:

- Apply such Lean concepts as 5S, waste reduction, process mapping, value stream mapping and mistake proofing.
- Define, scope and execute DMAIC projects and Kaizen events.
- Apply a variety of DMAIC tools to business issues and transition projects from phase to phase.
- Apply basic and more advanced statistical analyses to determine the relationship between key inputs and process outputs.
- Effectively manage team dynamics and understand how to work with multiple levels of leadership to remove barriers and achieve project success.
- Close projects and hand over control to process owners.
- Present projects to instructors, peers and managers.

This course enabled me to upgrade from a green belt to a black belt with great proficiency and speed. The classroom experience and instructors were absolutely terrific, directly enabling me to apply what I learned to get immediate results on a project, and to keep solving process problems on an ongoing basis.

Karry Kirchner - *Process Improvement Leader, MBB, Siemens Industry, Inc.*

HOW YOU WILL LEARN IT

Classroom

The classroom version of this course transfers needed knowledge and skills to students via interactive lecture, group exercises, process and tool simulations, individual exercises and the application of learning to a real improvement project in the workplace.

In the classroom, BMGI expert instructors are interesting and engaging, transferring knowledge from their extensive industry experience and thorough set of course content. Instructors also vigorously challenge students to stretch themselves, and support them in this regard, so they can extract the most value from the experience.

The duration of this course is purposefully spread out over a three-month time frame because the scope and depth of learning is extensive. Also, this gives future black belts the time they need to



COURSE AT A GLANCE

Prerequisites

Classroom: ▶ Green belt status with basic knowledge of Lean and Six Sigma concepts and techniques. [Click here](#) for more information.
▶ Recommended reading

Online: ▶ Green belt status with basic knowledge of Lean concepts and techniques.
▶ Recommended reading

Course Length

Classroom: 3 weeks (1 full week each month for 3 months)
Online: 108 hours of self-paced study and application (Typically over a 12-week period, but 12 months is allowed)

Cost

Classroom:  \$ 7,485
 € 7,485 (Exclusive VAT)
 \$3,550
€ 10,974
Online: \$ 1,325

Course Includes

- ▶ Minitab 16 software license (classroom option only).
- ▶ Access to BMGI's eLearning content, including quizzes, exams, tools and templates.



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achieve certification by finishing all assignments, passing comprehensive exams and completing a successful improvement project.

Classroom Agenda

WEEK ONE

- Review of Lean Six Sigma Green Belt
- Project Charters/Workshop
- Jobs to be Done
- Outcome Expectations
- Introduction to Minitab
- Basic Statistics 2
- Project Report Outs
- Daily Teachbacks
- Change Management
- Project Report Outs
- Value Stream Mapping Exercise
- Project Management
- Measurement System Analysis – Attribute Agreement Analysis
- Measurement System Analysis – Continuous Data
- Capability Analysis (1) – Attribute Data
- Capability Analysis (2) – Continuous Normal Data
- Capability Analysis (3) – Continuous Non-normal Data
- Minitab Part 2
- Preparation for Week 2

WEEK TWO

- Project Reviews
- Hypothesis Testing Review
- Minitab Graphical Techniques
- Flow Review
- Central Limit Theorem
- Confidence Intervals
- Pull Review
- Mean & Variance Tests
- Proportions Testing
- Contingency Tables GOF
- Sample Size Selection
- Correlation/Linear Regression
- One Way ANOVA
- Improve Phase Roadmap
- Intro to Design of Experiments (DOE)
- Full Factorial Designs
- Next Steps

WEEK THREE

- 2K Factorial Designs
- Attribute DOE
- Project Reviews
- 2K Fractional DOE Designs
- Simulation Exercise DMAIC / DOE
- Introduction to Logistic Regression
- Advanced Regression
- Introduction to Control Charts
- Variable SPC Techniques
- Attribute SPC Techniques
- Control Methods
- Introduction to Surveys
- DMAIC Review & Final Reports

Online

The online version of this course is delivered through BMGI's state-of-the-art, interactive, flash-based eLearning system—complete with engaging visual content, simulations, real-world case studies and progressive learning stages that are toll-gated with quizzes and comprehensive exams.

Students master the learning modules at their own pace and in their own time, supported by expert BMGI instructors who rely on their extensive experience in multiple industries to reinforce key concepts and skills.

BMGI's online instructors also shepherd students through the stages and activities required to finish all their assignments, pass all three exams, complete an improvement project and become officially black belt certified.

There is no limit to the individualized mentoring support you can receive from BMGI instructors via any mode of communication you desire: email, text message or phone. The online course is designed to fully accommodate your time schedule and preferences.



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Note: Statistical analysis software (Minitab 16 or SigmaXL) is *not* included in the online course cost and must be purchased separately.

Blended

The blended learning option for this course is flexible in terms of what your business or organization needs. We can design a customized program for your company that incorporates the best of our online learning, classroom instruction, webinars and mentoring support. This program is ideal for organizations that have a regionally dispersed or globally diverse employee base speaking several different languages.

Cost

Contact us to discuss your need for the blended learning option and its cost.

Certification Requirements

- ▶ Complete all assignments.
- ▶ Pass all exams (3).
- ▶ Finish one workplace improvement project approved by a BMGI master consultant.

Prefer customized training at your location?

CALL for details ▶ +1 303-827-0010