Practical Leadership in Lean Six Sigma Black Belt Training Course



09 - 13 Nov 2026

Lisbon

4500 € (Per Person)

Ref: #QUA7331_5234

Course Introduction / Overview:

The Lean Six Sigma Black Belt is more than a certification; it is a demonstration of a professional's ability to lead complex improvement projects that deliver significant financial and operational results. This training course is designed to provide aspiring and current Black Belts with the frameworks and practical skills to lead these projects, manage teams, and drive sustainable change. It goes beyond the foundational concepts of Lean and Six Sigma to focus on the advanced tools, statistical methods, and leadership principles that are essential for a successful Black Belt. We will explore how to use the DMAIC (Define, Measure, Analyze, Improve, Control) methodology, conduct a rigorous root cause analysis, and manage the human element of change. The curriculum is informed by the foundational work of global academics like W. Edwards Deming, whose "14 Points for Management" and deep statistical expertise are the bedrock of modern quality management. His work provides a valuable lens for thinking about how to build a culture of continuous improvement. This program provides a clear blueprint for turning a complex problem into a successful project that drives business success. BIG BEN Training Center is committed to empowering professionals to become true agents of change.

Target Audience / This training course is suitable for:

- Continuous improvement managers.
- Project managers.
- Quality assurance professionals.
- Process engineers.
- Operations managers.
- Strategic planners.
- Executive leaders.

Target Sectors and Industries:

- Manufacturing and engineering.
- Healthcare and pharmaceuticals.
- Financial services.
- Technology and software.
- Retail and consumer goods.
- Aerospace and defense.
- Government agencies and public services.

Target Organizations Departments:

- Operations.
- Quality Assurance.
- Continuous Improvement.
- Project Management Office (PMO).
- Corporate strategy.
- Customer service.
- Supply chain.

Course Offerings:

By the end of this course, the participants will have able to:

- Lead a complex Lean Six Sigma project from start to finish.
- Apply advanced statistical tools for process analysis.
- Manage and coach a Green Belt team.
- Develop a data-driven process improvement plan.
- Implement controls to sustain project gains.
- Communicate project results to executive leadership.
- Navigate the organizational and cultural challenges of change.
- Develop a personal leadership roadmap for continuous improvement.

Course Methodology:

This training course uses a highly interactive and case-based methodology to ensure participants gain actionable skills in Lean Six Sigma. The program incorporates detailed case studies of real-world projects, including how to define a problem, collect data, and implement a solution. We will use interactive workshops and data analysis exercises to practice critical skills like creating a process map, conducting a statistical analysis in Minitab or a similar tool, and leading a brainstorming session. The course includes a hands-on group project where participants will work together to conduct a full DMAIC project on a fictional business process. BIG BEN Training Center believes that hands-on training is essential for mastering these new ways of working. Our expert facilitators will guide discussions and provide personalized feedback, ensuring that participants leave with confidence and practical experience needed to lead a successful Lean Six Sigma project.

Course Agenda (Course Units):

Unit One: Define Phase and Project Leadership

- The role of the Black Belt.
- Selecting and defining a project.
- Building a project charter.
- Voice of customer analysis.
- Managing a project team.

Unit Two: Measure Phase and Data Analysis

- Developing a data collection plan.
- Introduction to statistical analysis.
- Measurement system analysis.
- Process capability analysis.
- Graphical analysis and charting.

Unit Three: Analyze Phase and Root Cause Analysis

- Identifying potential causes.
- The 5 Whys and Fishbone diagram.
- Hypothesis testing.
- Regression analysis.
- Advanced statistical tools.

Unit Four: Improve Phase and Solution Implementation

- Brainstorming and selecting solutions.
- Pilot testing and validating solutions.
- Risk analysis for implementation.
- Change management and communication.
- Building a control plan.

Unit Five: Control Phase and Sustaining Gains

- Statistical Process Control (SPC).
- Creating a control chart.
- Documenting and standardizing the process.
- Closing the project and transferring ownership.
- Developing a personal action plan.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can a Lean Six Sigma Black Belt, whose role is often data-driven, successfully navigate the human and cultural challenges that can make or break a management project?

What unique qualities does this course offer compared to other courses?

This training course is a highly specialized program that focuses on the practical application and leadership of Lean Six Sigma, which sets it apart from other certification courses. We go beyond a simple focus on the tools to provide a holistic framework for leading a successful project that delivers real business value. Our curriculum is tailored to address the specific needs of aspiring Black Belts, providing them with the frameworks to manage not just the data but also the people and the politics of a complex change initiative. The course distinguishes itself by emphasizing not only the technical skills needed to run a statistical analysis but also the strategic and leadership skills required to influence a positive outcome. By focusing on both the practical and the leadership aspects of Lean Six Sigma, this program provides an invaluable skill set that is essential for any professional committed to a career in process improvement.