
Lean Six Sigma Blackbelt

Course Description

The Lean Six Sigma Black Belt course is an intensive program designed for experienced professionals who are ready to lead high-impact process improvement projects and drive strategic organizational change.

Combining advanced statistical analysis, Lean methodologies, and leadership skills, this course equips participants to solve complex problems, eliminate waste, and deliver measurable results. Through hands-on exercises, real-world case studies, and project work, participants will learn to link process improvements directly to financial performance, ensuring that every initiative produces tangible bottom-line gains.

Participants will master DMAIC and DFSS methodologies, advanced statistical tools, change management techniques, and strategic deployment approaches. By the end of the program, they will be capable of leading cross-functional teams, coaching Green Belts, and aligning improvement projects with the organization's financial and strategic goals.

Course Objectives

Lead Complex Improvement Initiatives:

- Plan, execute, and sustain Black Belt-level Lean Six Sigma projects across diverse processes and functions.
- Align improvement projects with corporate strategy and customer requirements.

Drive Measurable Financial Results:

- Quantify cost of poor quality (CoPQ) and identify high-return improvement opportunities.
- Calculate and track financial benefits such as reduced operating costs, increased throughput, inventory reduction, and improved profitability.

Apply Advanced Analytical & Statistical Methods:

- Utilize regression analysis, hypothesis testing, design of experiments (DOE), and multivariate analysis.
- Leverage statistical software to model, predict, and optimize process performance.

Implement Lean Tools for Waste Elimination:

- Apply value stream mapping, takt time balancing, SMED, and error-proofing to increase efficiency.
- Integrate Lean methods into Six Sigma projects for faster, more sustainable results.

Lead & Influence Organizational Change:

- Facilitate cross-functional collaboration and overcome resistance to change.
- Mentor and develop Green Belts to multiply organizational improvement capability.

Training Format Options

• 5 Days if participant has completed eLeanSixSigma's Lean Six Sigma Greenbelt training.

• 10 Days if participant has not completed our Greenbelt training.