

IASSC Certified Lean Six Sigma Black Belt™ Course

Course Duration: 40 Hrs.

Course code: LSSBB

Course Overview

The IASSC Certified Lean Six Sigma Black Belt™ course is designed for professionals aiming to master advanced Lean Six Sigma methodologies for process improvement and quality management. This globally recognized program focuses on the application of the DMAIC (Define, Measure, Analyze, Improve, Control) model, advanced statistical tools, and leadership skills to lead complex projects. Participants will gain expertise in driving strategic business initiatives, eliminating waste, and optimizing processes to achieve measurable results.

What you'll learn?

The course will help students to understand:

- Master the Lean Six Sigma DMAIC methodology at an advanced level.
- Apply advanced statistical analysis for process improvement.
- Identify and eliminate waste to optimize performance and reduce costs.
- Lead cross-functional project teams to achieve organizational goals.
- Develop strategic problem-solving and decision-making skills.
- Understand change management principles for sustainable improvements.
- Prepare for the IASSC® Certified Black Belt™ exam.

Target Audience

- Experienced Quality Managers and Process Improvement Specialists.
- Senior Project Managers and Team Leaders.

- Operations Managers and Business Process Owners.
- Professionals seeking advanced Lean Six Sigma expertise.
- Individuals aiming for leadership roles in process optimization.

Pre-Requisites

Prior Lean Six Sigma Green Belt certification (recommended).

- Understanding basic Lean Six Sigma concepts and tools.
- Experience in project or process management is highly beneficial.
- Analytical mindset and familiarity with data-driven decision-making.

Course content

Module 1: Introduction to Lean Six Sigma Black Belt

- Overview of Lean Six Sigma at the Black Belt level
- Role and responsibilities of a Black Belt Professional

Module 2: Define Phase

- Project selection and scoping
- Voice of the Customer (VoC) and Critical to Quality (CTQ) requirements
- Project charters and stakeholder Analysis

Module 3: Measure Phase

- Process mapping and value stream analysis
- Measurement system analysis (MSA)

Module 4: Analyze Phase

- Root cause analysis tools
- Hypothesis testing and regression analysis
- Identifying process variations and bottle necks

Module 5: Improve Phase

- Generating and evaluating improvement solutions
- Design of Experiments (DOE)
- Risk assessment and mitigation Strategies

Module 6: Control Phase

- Control plans and statistical process control (SPC)
- Sustaining improvements through change management
- Project closure and knowledge transfer

Module 7: Leadership and Change Management

- Leading project teams effectively
- Influencing stakeholders and building consensus
- Organizational culture and continuous improvement mindset

Module 8: Exam Preparation

- IASSC Black Belt exam format and requirements
- Practice tests and case study reviews