



Certified Lean Six Sigma Black Belt

Table of Contents

Overview	2
Objectives	2
Program Outlines	3
Targeted Groups	5
Program Duration	6
Pre-Requisite	6
Online Certification Exam	6
Benefits of Being CLSSBB	7
Training Material	10
Program Fees	10
Payment Methods	11
Date, Time, Venue	11
Registration Process	11
Presentation Approach	12



Overview

Six Sigma is a set of management and analytical techniques intended to improve business processes by greatly reducing the probability that a defect will occur.

Six Sigma seeks to improve the quality of process output by identifying and eliminating root causes of defects and minimizing variation in business processes. It uses a set of quality management methods, and statistical techniques, and creates a special infrastructure of people within the organization to implement a lean six sigma project.

Six Sigma projects ensure process output at high quality and customer satisfaction. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has specific value targets, for example: reducing cycle time, reducing pollution, reducing costs, increasing customer satisfaction, and increasing profits.

Lean and Six Sigma have been taught as separate methods for many years, but it's now common to see Lean Six Sigma get the best of their combination.

Lean is a systematic approach to eliminating activities that don't add value to the product, service, or customer. It emphasizes removing wasteful steps in a process and taking only value-added steps.

Different companies are now hiring LSSBB or SSBB to lead six sigma projects that will reduce operations costs, improve their business output quality, and in the end improve their customer satisfaction.

Objectives

Achieving certification as Lean Six Sigma Black Belt (LSSBB) can be of great value and benefits for your career path. The knowledge, skills, and values that come with this certification will enable you to move ahead within your company and make you more attractive candidate to other organizations.

Certified Lean Six Sigma Black Belt (CLSSBB) training program will enable the participants to better understand their business processes and acquire the required skills, such as management skills, analytical skills, leadership skills, and communication skills that will enable you to lead and mentor a team and conduct a successful lean six sigma projects.

Organizations that have CLSSBB employees can dramatically improve customer satisfaction, reduce costs, and then improve their market share and profit margin.

Read about the advantages of SSBB certificates for the participant and for the organization as well on pages 7 and 8.



Program Outlines

Part I: Six Sigma and the Organization

Chapter 1: Values of Six Sigma for an Organization

- 1.1 What and Why is Six Sigma?
- 1.2 Six Sigma and Defects
- 1.3 Statistical Definition of Six Sigma
- 1.4 Reduction of Cost of Poor Quality: Financial Impact of Six Sigma
- 1.5 Six Sigma Critical Success Factors

Chapter 2: Organizational Process Management

- 2.1 Context of the Organization
- 2.2 Organizational Strategic Goals
- 2.3 Business Process Modeling
- 2.4 Process Documentation
- 2.5 Mapping the Process
- 2.6 Process Capability and Performance
- 2.7 Process Manpower
- 2.8 Continuous Process Improvement

Chapter 3: Essential Management Skills for LSSBB

- 3.1 Leadership Skills
- 3.2 Creative Thinking
- 3.3 Team Management
- 3.4 Change Management

Part II: DMAIC for Six Sigma Projects

Chapter 4: Define Phase

- 4.1 Organization Processes Review
- 4.2 Voice of the Customer
- 4.3 Risk Identification and Assessment
- 4.4 Project Selection
- 4.5 Project Scope



- 4.6 Defining the Problem
- 4.7 Project Objectives
- 4.8 KPIs for Tracking the Objectives
- 4.9 Project Scheduling and Tracking
- 4.10 Project Charter

Chapter 5: Measure Phase

- 5.1 Importance of Data
- 5.2 Normal and Non-normal Data
- 5.3 Data Collection
- 5.4 Sampling Methods
- 5.5 Descriptive Statistics
- 5.6 Normal Distribution in Practice
- 5.7 Measuring Key Process Characteristics
 - Process Capability
 - Process Sigma Level
 - Process Performance
 - DPMO
 - Process Yield

Chapter 6: Analyze Phase

- 6.1 FMEA
- 6.2 Root Cause Analysis (RCA)
 - Brainstorming
 - Affinity Diagram
 - Fishbone Diagram
 - 5 Whys
- 6.3 Fault Tree Analysis (FTA).

Chapter 7: Improve Phase

- 7.1 Implementation of Solutions
- 7.2 Solutions Validation through Inferential Statistics
- 7.3 Confidence Intervals
- 7.4 Test of Hypothesis
- 7.5 Statistical Modeling and Process Optimization
- 7.6 Correlation and Regression
- 7.7 Design of Experiment (DOE)



- 7.8 ANOVA
- 7.9 DOE in Practice Using Minitab
- 7.10 Process Improvement using Lean Principles
- 7.11 Optimize the Process through Lean Time Analysis
- 7.12 Workplace improvement using the 5S Japanese strategy.
- 7.13 Waste Identification and Elimination

Chapter 8: Control Phase

- 8.1 Statistical Process Control
- 8.2 Control Charts Interpretation
- 8.3 Control Plan and Sustain Achievements

Chapter 9: Practical Project Case

- 9.1 A participant can apply the LSSBB methodology on a case using data from his/her industry and then can present the project case during the program training sessions.

Part III: Design for Six Sigma (DFSS)

Chapter 10: Introduction to IDDOV Methodology

- 10.1 Identify
- 10.2 Define
- 10.3 Design
- 10.4 Optimize
- 10.5 Validate

There will be different practical cases, workshops, group activities from the participants' industries. In addition to different practical cases using Minitab.

Targeted Groups

CLSSBB training program is suitable for public, private, production, IT, healthcare, banks, maintenance, pharmaceutical, and service organizations. In addition, it will be a great benefit for general managers, middle management, quality managers, engineers, consultants, change agents, process owners, project managers, quality personnel, team leaders, and members who will be involved in leading lean Six Sigma projects, and all who seek the LSSBB certification.



Program Duration

The Certified Lean Six Sigma Black Belt (CLSSBB) program will be held for 72 training hours over 24 days, 3 hours per day. In addition to 5.5 hours for the certification exam. This program can be customized for certain needs and requirements and presented as in-house training at an organization facility.

Pre-Requisite

- Attend a Six Sigma green belt or lean six sigma green belt course PLUS a minimum of two years of work experience, OR
- Conducted one six sigma project PLUS one-year work experience, OR
- Four years of work experience, OR
- Master's degree PLUS a minimum of one-year work experience.
- Ready to work on different assignments.
- Good analytical and statistical thinking is a plus.
- Good command of the English language.

Online Certification Exam

To be LSSBB certified and to achieve the global credential CLSSBB, a participant must pass the online exam and score 65% or above. The exam is available for program participants and for other clients who seek CLSSBB global credentials.

JAQM deals with all examinees equally with no bias. Exam results are checked multiple times by different persons and scored very accurately, therefore, JAQM doesn't provide answers to the certification exams, and doesn't accept requests to review the exam results.

CLSSBB certification exam is an open book type and will be conducted ONLINE. The exam consists of 165 multiple-choice questions. Each question is associated with 4 choices, you must select the best one that fits the question. Exam duration is five and a half hours (330 minutes) and will be conducted in two sessions.

All participants will get a completion e-certificate issued by the Jordan Academy for Quality Management (JAQM) and internationally accredited by the International Accreditation Organization (IAO) located in the USA.

In addition, participants who pass the certification exam will get the "Certified Lean Six Sigma Black Belt" e-certificate issued from JAQM and internationally accredited by IAO. Participants who fail the exam can sit for a new exam at retake fees of JD200.



Before the Exam

- Choose a quiet area at your home or office where to take the exam.
- Manage your place to avoid loud noises, such as television, radio, family, music, or visitors.
- Make sure you have all the required training materials and any other reference to be printed in hard copy as you can't access your computer or laptop all the exam duration.
- Do not go to public places, such as coffee shops, restaurants, or libraries.
- Make sure that your computer is plugged into a power source for the duration of the exam.
- Make sure that you have stable and continuous Internet connectivity.
- Access the online exam system 15 minutes before the scheduled time.

During the Exam

- You should use a PC or laptop with a webcam and microphone, not using a mobile. Mobiles should be switched off all the exam duration.
- You must place yourself within the webcam view, if you move out of the webcam view, then your exam session will be canceled.
- It is recommended to use a standalone scientific calculator.
- Get ready to remain in the webcam view for the duration of the exam.
- You must share your screen (Desktop) to be viewed by the exam observer.
- Exam activities will be recorded at the JAQM side for evaluation purposes. JAQM will evaluate the exam process and the examinee's behavior.
- Recording the screen using any third-party application is not allowed. If you are caught recording the screen, your exam will be canceled, and you will be subject to any legal action that JAQM will take against you.
- No one else can be in the room where you sit the exam.
- At the end of the exam, you have to move all your answers to an official answers sheet that will be sent to you from JAQM.

Benefits of Being CLSSBB

- For Individuals:

1. *Competitive Advantage:*

- CLSSBB professionals stand out from other candidates in the job market, particularly in industries like manufacturing, healthcare, finance, and logistics, where process improvement is highly valued.



2. Advanced Problem-Solving Skills:

- CLSSBB professionals have a deep understanding of Lean and Six Sigma methodologies, allowing them to solve complex problems effectively, improve processes, and reduce waste.

3. Enhanced Career Opportunities:

- Being CLSSBB certified is highly regarded in various industries, opening doors to leadership roles in process improvement, quality management, and operational excellence.
- Many employers seek Black Belt professionals for their expertise in continuous improvement, which often leads to higher-paying positions.

4. Broadened Job Opportunities Across Industries:

- The skills gained through CLSSBB certification are applicable across a wide range of industries, including manufacturing, healthcare, finance, IT, and logistics. This opens opportunities for positions such as Quality Analyst, Process Improvement Specialist, Operations Manager, and more. It also makes you a more attractive candidate to global companies.

5. Leadership and Project Management Skills:

- Black Belts are trained to lead and manage cross-functional projects, improving leadership skills that are critical for advancement into senior roles.
- CLSSBB certification demonstrates proficiency in managing teams, communicating across departments, and driving change effectively.

6. Data-Driven Decision Making:

- Black Belts are skilled in data analysis, enabling them to make informed, evidence-based decisions to enhance operational efficiency and solve problems.

7. Personal Growth and Satisfaction:

- The skills acquired through CLSSBB certification foster a continuous improvement mindset, helping individuals build confidence and achieve a sense of accomplishment in their work.

• For Organizations

1. Increased Efficiency and Reduced Costs:

- CLSSBB-certified employees can lead initiatives to streamline operations, reduce waste, and minimize errors, resulting in significant cost savings and operational efficiency.



2. Higher Quality and Customer Satisfaction:

- By implementing Six Sigma methodologies, Black Belts improve product and service quality, leading to fewer defects, enhanced reliability, and higher customer satisfaction and retention.

3. Competitive Edge in the Market:

- Organizations with CLSSBB professionals gain a competitive advantage by consistently improving processes, which can result in faster production times, higher-quality products, and better service offerings.

4. Improved Process Performance and Consistency:

- Black Belts help standardize processes across departments, ensuring consistent performance and reducing variability, which is critical for compliance and quality control.

5. Innovation and Continuous Improvement Culture:

- CLSSBB professionals foster a culture of continuous improvement by encouraging data-driven decision-making, cross-functional collaboration, and a focus on eliminating inefficiencies across the organization.

6. Stronger ROI on Process Improvement Initiatives:

- Organizations that invest in Black Belt certification often see a strong return on investment as Black Belts identify and implement solutions that directly impact the bottom line.

7. Enhanced Organizational Agility:

- With the skills to optimize workflows and improve processes, Black Belts make organizations more adaptable to changes in market demands, regulatory requirements, and operational challenges.

8. Leadership Development:

- Black Belts are trained to lead project teams and mentor Green Belts and other employees, supporting the development of a strong leadership pipeline within the organization.

9. Cost Reduction and Improved Revenue:

- By improving processes and reducing errors or defects, organizations can significantly lower operational costs and increasing profitability.



Training Material

Once a participant has confirmed his/her registration, he/she will receive the training material in pdf format. We strongly recommend all participants print the training material and use it during the training sessions so they can easily follow up with the instructor and be able to take notes on each topic.

Program Fees

The standard fees for this CLSSBB program are JD1050, and the certification exam fees are JD300. JAQM offers different discounts as follows:

- Individuals who previously attended JAQM CLSSGB training programs will get a special discount of 40% on the total fees. Accordingly, the total fees will only be **JD810** including the certification exam.
- Other individuals who didn't attend JAQM Six Sigma training program will get a discount of 30% on the total fees. Accordingly, the total fees will only be **JD945** including the certification exam.
- Organizations who nominate two participants or more will get a discount of 20% on the total fees. Accordingly, the total fees will only be **JD1080** per participant including the certification exam.
- Fees for organizations who have only one participant are **JD1350** including the certification exam.

Fees are to include:

- Completion e-certificate issued by JAQM and internationally accredited by the International Accreditation Organization (IAO) located in the USA will be presented to participants who attend at least 90% of the program time.
- Certification "Certified Lean Six Sigma Black Belt" e-certificate issued by JAQM and internationally accredited by IAO will be presented to participants who pass the certification exam.
- Training material in pdf format.
- Handouts
- The instructor's notes (Whiteboards)



Payment Methods

To make it easy to settle the program fees, JAQM offers different alternatives for fees payment as follow:

- Cash deposit or transfer to JAQM's bank.
- CliQ: alias name: JAQM
- Western Union transfer
- eWallet

Please choose in the registration form which method is best for you so we can send you the details based on your choice.

Date, Time, Venue

- Date: 11/10 – 29/12/2026 (Su & Tu)
- Time: 6:30 – 9:30 PM Jordan Time.
- Exam date and time: will be agreed upon with the participants.
- Venue: Online using zoom platform.

Registration Process

To enroll in this program, please click the following link and fill out all the fields in the registration form:

<https://forms.gle/tKUzb2exDtPWsQUz6>

Once you submit the application form, you will receive a notice that your application is received and recorded. Registration is confirmed only after fees are settled as per your payment method.

For organizations' delegates, HR or training department can send an email to confirm the registration for their delegates including their names, emails, and mobiles.

For further information or details, please email JAQM at training@jaqm.net, or call +962 6 516 0157, Mobile and WhatsApp: +962 7 7744 1808

JAQM reserves the right to postpone, cancel, or reschedule the course when necessary. Participants will be notified of any such changes accordingly. If the course is cancelled by JAQM, or if a participant is unable to attend on the rescheduled dates, any fees paid will be refunded in full.



Presentation Approach

- Online live and interactive with the instructor
- English for data show
- English for material and handouts
- English/Arabic for delivery and discussion
- Different practical cases, workshops, and group activities
- Different practical applications using the Minitab software.
- Different questions at the end of each part so you can get familiar with the real CLSSBB certification exam.
- Mockup exam at the end of the training program to simulate the real CLSSBB certification exam.

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