

Online
Lean Six Sigma Master Black Belt (MBB)
Training and Certification Program

With coverage of advance topic using Python

(Batch -17)



During

Phase-I: August 26 -31, 2024 (6 days)

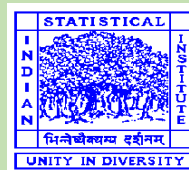
Phase-II: September 23-28, 2024 (6 days)

Duration: 12 days

LAST DATE FOR REGISTRATION: 22 August 2024

Final online MCQ test: 06 October 2024 during 7:00 p.m. to 9:00 p.m.

Conducted by



SQC & OR Unit, Mumbai
Indian Statistical Institute

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101 Maharshi Karve Road, Mumbai 400 020.

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Mobile: 9869242240 / 9969928144

About this Program:

SQC & OR Unit, Mumbai offers this "**Online Classroom**" type Lean Six Sigma Master Black Belt (MBB) training and certification program. Entire training sessions and end-examination will be through online mode. The **soft copy of the training material** (*in pdf*) and **data set** (for class exercises) will be shared through a virtual drive. The participants should download the training material and the data set from the drive before attending the classes. The training sessions will primarily use **Minitab software** and **MS Excel** for data analysis. Participants either may purchase the **Minitab license**, or they may download its one-month **trial version**. The participants who will be using Minitab 30 days trial version are requested to download the software during Phase -I, as the program has been planned to complete within the one-month time frame.

About the Online sessions:

The program will use either **Microsoft Teams** or **Zoom** for online sessions.

Why should I attend this MBB program?

Implementation and sustenance of a Six Sigma / Lean culture in an organization's progress certified MBB plays a critical role. The MBB certification program, offered by SQC & OR Unit, Mumbai is designed to sharpen the technical skill, coaching skill and internal advocacy skill to the existing Black Belts and quality personals to lead the six-sigma effort within their organization.

After attending this training, the participants will

- Be able to integrate the Six Sigma DMAIC/DFSS approach with the Lean improvement methodology for executing their process improvement projects.
- Gain an in-depth understanding of familiar and advanced statistical tools and techniques which will assist in guiding various Lean six sigma projects.
- Learn to create a measurement system that pulls for the creation of lean or six sigma projects when it is most beneficial for the organizations.
- Finally, gain knowledge of guiding various kinds of projects.

Course Contents:

In addition to selected topics of Six Sigma Black Belt Body of Knowledge, the following subjects likely to be discussed.

- Overview of Six Sigma Methodology and Lean
- Review Strategies for effectively implementing Six Sigma and Lean Six Sigma in an organization
- Understanding of Deployment Strategies – Business Goals/ Dashboards/ Balance Business Score Card or Customer Goals including linkages with financial goals
- Executive and other roles and responsibilities in LSS implementation
- Six Sigma Project selection-linkage to strategy
- Overview of Lean Six Sigma Project execution (DMAIC or DFSS/ DMADOV)
- Project Review Guidelines and selection of Belts for the projects
- Voice of Customer, Affinity Diagram & Quality Function Deployment
- Distribution fitting of a data, evaluation of Process Stability and Concept of Process Capability and assessment of Sigma level
- Identification of VA and NVA activities in Processes.
- Value Stream Mapping
- Lean tools and integration of Six Sigma and Lean concept, i.e., Lean Six Sigma
- Multiple Regression, Logistic regression and use of the same in cause validation
- Reliability Theory, Design FMEA, Pugh Matrix, Fault Tree Analysis
- Design of Experiments including RSM
- Taguchi Methods of Parameter and Tolerance Design
- Exploratory Data Analysis
- Multivariate Analysis (cluster analysis, factor analysis, Discriminant analysis)
- Predicting Modelling using Classification and Regression Tree
- Conjoint Analysis, Simulation
- Queuing theory
- Change Management Process dealing with resistance to change,
- Concept of Poke Yoke, Visual Workplace, 5S & Planning for full-scale implementation.
- Work through at least 3 Six Sigma projects of different applications
- Process of Closing the Project

Advance topics:

- Introduction to machine learning and python.
- Prediction modelling using machine learning technique.
- CART, Random Forest, bagging and boosting, ANN.

Eligibility:

Degree holder in any discipline with at least six months of specialized training in quality management sciences from recognized institutions like ISI etc. and /or Certified Black Belts from recognized certification bodies like ASQ, ISI, Motorola

University, Rath & Strong etc. Each candidate should have at least two years of experience in conducting/ guiding at least ten improvement projects.

Faculties:

Experienced faculties from Indian Statistical Institute, having in-depth experience in implementing six sigma in various leading manufacturing and service organizations across the globe, will be associated with the training sessions.

Examination/Assignments:

- An assignment will be given after the 1st module, i.e., first six days and participants need to complete it within 15 days.
- There will be two hours online **MCQ- Test**, and participants should score a **minimum of 70% marks** to pass the test.

MBB Certification Criteria:

- An Enrolment certificate will be issued after securing 70% marks in the MCQ-test and successful completion of the assignment.
- Final MBB certificate will be issued to all enrolled participants after submitting a report of guiding/ mentoring five projects on process improvement using Six Sigma (DMAIC or DFSS) approach & conducting 120 hours of training in related topics or attending three conferences/seminars/workshops on related subjects in the following one year.

Program Schedule :

The entire training program is divided into two phases (Phase -I & Phase - II) as given below:

August 26-31, 2024 (Phase-I)- 6 days

September 23-28, 2024 (Phase-II)- 6 days

MCQ Test: 06 October 2024 (Sunday) from 7:00 p.m. – 9:00 p.m. (IST)

Everyday Online class timing

09:30 a.m. – 11:00 a.m. Session 1

11:00 a.m. – 11:30 a.m. Tea break

11:30 a.m. - 01:00 p.m. Session 2

01:00 p.m. – 02:00 p.m. Lunch break

02:00 p.m. – 03:30 p.m. session 3

03:30 p.m.– 04:00 p.m. Tea break

04:00 p.m. - 05:30 p.m. Session 4

Course fee:

Rs. 50000 + 18 % Tax as per Govt. Rules. Total fees including tax: **Rs.59000 /-** per participant. Fees can be paid **through online bank transfer only**. The bank details for online payment are:

Bank Name:	STATE BANK OF INDIA
Account Name:	Indian Statistical Institute,
Account Type:	Current
Bank Account No:	10996682279
Branch:	MUMBAI MAIN BRANCH
Bank Address:	Mumbai Samachar Marg, Horniman Circle, Fort. Mumbai 400023
IFSC code:	SBIN0000300

Note: Fees Will be refunded if ISI cancels the program.

Registration:

Registration is purely on a 'first come, first allotted basis. Participants may call to 9869242240 or 9969928144 for any clarification.

Please apply to this program through “**Register Now**” option in the home page of our site www.isimum.ac.in. After verifying your application, we will communicate to you through e-mail to pay the course fee. Please pay the fee after receiving official mail from us.

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