

On-line

Weekend

**Six Sigma Green Belt Training and
Certification Program**

Define

Measure

Analyse

Improve

Control

During

November 24-26, & December 08-10 of 2023 (total 6 days)

Final Online MCQ Test: 17 December 2023 (Sunday) during 2:00 p.m.- 04:00 p.m.

LAST DATE FOR REGISTRATION: 20 November 2023

Please enquire (mobile: 9969928144 / 7738479688) for the seat availability before registration

Admission is purely on 'first come, first allotment' basis.

Conducted by



SQC & OR Unit, Mumbai

Indian Statistical Institute

Room No. 320, 3rd Floor Old C G O Building,

101 Maharshi Karve Road, Mumbai 400 020.

Tel No.022-22014588,

Email: info@isimum.ac.in & sqcbombay@gmail.com,

Website: <https://www.isimum.ac.in/>

Why should I attend this program?

The objective of this program is to disseminate the knowledge of Six Sigma methodology among the participants so that they can

- Identify **quality problems** in various manufacturing and service processes within their organization.
- They can link the quality problems to the specific process, products (or services), and people.
- They can recognize **critical to quality characteristics (CTQ)** in various quality-related problems.
- Participants can apply the **DMAIC approach** of Six Sigma methodology for their process improvement projects.
- Participants can perform various **graphical and statistical analysis** of the process data to extract valuable and actionable information.
- They can **interpret** various statistical measures of the data.
- Participants will be aware of the unique features of popular **commercial software** used in six sigma implementations.
- Finally, the participants will be knowledgeable for identifying and carry out **real-life process improvement projects**, which will significantly improve the bottom line of their organization.

Body of Knowledge: Six Sigma Green Belt Certification Course

1. Overview of Six Sigma Methodology
2. Cultural imperatives to Six Sigma
3. Identification, Prioritization and selection of Improvement opportunities
4. Roles and responsibilities in Six Sigma implementation
5. Over view of Six Sigma Project execution (DMAIC Define- Measure- Analyze- Improve & Control), and Gate Review Questionnaire
6. Development of Project Team and Charter
7. Define and Map Processes to be improved (SIPOC (supplier, input, process, output, customer) / COPIS (customer, output, process, input, supplier), Activity Flow Chart)
8. Identification of critical to customer / critical to business characteristics
9. Voice of Customer
10. Type of Data
11. Knowledge of Statistical distributions Binomial, Poisson and Normal
12. Use of prioritisation matrix in data Collection
13. Introduction to various statistical software packages for data display & analysis like Excel, Minitab,

14. Measurement System Evaluation (Gauge R&R) for variables as well as for attribute measurements (Kappa Value)
15. Understanding special causes vs. common causes variation (like dot plots, box plots, histogram and control charts)
16. Graphical summary of data (histogram, dot plot, box plot)
17. Pattern analysis of time series data using run chart and control chart
18. Normality test of a data, evaluation of Process Sigma Level.
19. Verification/validation of causes using workplace investigation (GEMBA)
20. Concept of correlation and Regression and use of the same in validating causes
21. Concept of Test of Hypothesis like 2 Sample t, Chi Square, ANOVA etc and use of the same in validating the causes
22. Generate Improvement Ideas using Creativity Techniques (Traditional & non-traditional)
23. Solution Evaluation Criteria, Evaluation of solutions and selection of solutions
24. Monitoring the results through statistical Process Control (like Control Charts, Pre-Control Charts etc) after implementation of the solutions
25. Monitoring the results as a part of established QMS through use of process audit, product audit and internal audits
26. Institutionalization and integration of the solutions
27. Process of Closing the Project

About this Program:

SQC & OR Unit, Mumbai offers this “**On-line Classroom**” type training and certification program through a virtual platform. All the training sessions, and examinations will be through on-line. 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** and **MS Excel** for data analysis. Participants either may purchase the **Minitab license**, or they may download its **trial version**. For any doubt clarification, participants may communicate with the faculties on weekdays during the training weeks through a phone call or video chat, or they may personally visit **SQC & OR Unit, Mumbai**, with a prior appointment with the faculties.

About the On-line sessions:

The program will use **Microsoft Teams** for online sessions. Participants must **sign up** in Microsoft Teams (<https://www.microsoft.com/en-in/microsoft-365/microsoft-teams/group-chat-software>) **with the e-mail id they will mention in their nomination form.** Participants may watch the following YouTube videos to know how to create a new Microsoft Teams account and attend a Microsoft Team session.

https://www.youtube.com/watch?v=oq_6-TJkGBA

<https://www.youtube.com/watch?v=BH6bSIwR0-4>

Target Participants:

Engineers/Managers/Executives from any functions, preferably having an Engineering/Science or Commerce background with basic knowledge of MS excel, can join in this program.

Faculties:

Experienced faculties from Indian Statistical Institute will be associated with the training session.

Examination :

Participants need to appear in a two-hour **on-line test** with **multiple-choice questions** (MCQ type) on **17 December 2023 (Sunday) during 02:00 p.m.-04:00 p.m.** They must score a **minimum of 60% marks** to pass the tests. Unsuccessful candidates should appear in a **repeat test** within next 10 days, without any extra fees.

Certification:

For the “**Six Sigma-Green Belt**” certification, participants must 1) *attend all the training sessions* and 2) *pass the Qualifying tests (MCQ type)*. Apart from these, interested participants are encouraged to carry out any real-life process improvement projects using the six-sigma approach. However, carrying out project is an **optional criterion** for the Certification, a participant **may or may not** opt for it. Interested participants should inform ISI and need to get the project from their parent organization where he/she is currently working. Indian Statistical Institute **will not provide any project.** However, they will assist in carrying out the project

free of cost. The participants need to submit a soft copy of the complete project report within six months from the last date of the training. After the successful completion of the project, a six-sigma green belt certificate will be issued **with the project name**. Otherwise, the certificate will be issued **without any project name**.

Program Schedule :

	Day / Date	Time	Session/Break
Phase-1	Day-1 24 November 2023 (Friday)	5:30 p.m. to 7:15 p.m. 7:15 p.m. to 7:30 p.m. 7:30 p.m. to 9:00 p.m.	Session -1 Break Session -2
	Day-2 25 November 2023 (Saturday)	9:30 a.m. to 11:00 a.m. 11:00 a.m. to 11:30 a.m. 11:30 a.m. to 1:00 p.m. 01:00 p.m. to 02:00 p.m. 02:00 p.m. to 03:30 p.m. 03:30 p.m. to 04:00 p.m. 04:00 p.m. to 05:30 p.m.	Session -1 Break Session -2 Break Session -3 Break Session -4
	Day-3 26 November 2023 (Sunday)	9:30 a.m. to 11:00 a.m. 11:00 a.m. to 11:30 a.m. 11:30 a.m. to 1:00 p.m. 01:00 p.m. to 02:00 p.m. 02:00 p.m. to 03:30 p.m. 03:30 p.m. to 04:00 p.m. 04:00 p.m. to 05:30 p.m.	Session -1 Break Session -2 Break Session -3 Break Session -4
	Day / Date	Time	Session/Break
Phase-2	Day-4 08 December 2023 (Friday)	5:30 p.m. to 7:15 p.m. 7:15 p.m. to 7:30 p.m. 7:30 p.m. to 9:00 p.m.	Session -1 Break Session -2
	Day-5 09 December 2023 (Saturday)	9:30 a.m. to 11:00 a.m. 11:00 a.m. to 11:30 a.m. 11:30 a.m. to 1:00 p.m. 01:00 p.m. to 02:00 p.m. 02:00 p.m. to 03:30 p.m. 03:30 p.m. to 04:00 p.m. 04:00 p.m. to 05:30 p.m.	Session -1 Break Session -2 Break Session -3 Break Session -4
	Day-6 10 December 2023 (Sunday)	9:30 a.m. to 11:00 a.m. 11:00 a.m. to 11:30 a.m. 11:30 a.m. to 01:00 p.m. 01:00 p.m. to 02:00 p.m. 02:00 p.m. to 03:30 p.m. 3:30 p.m. to 4:00 p.m. 4:00 p.m. to 5:30 p.m.	Session -1 Break Session -2 Break Session -3 Break Session-4
MCQ Test is on 17 December 2023 (Sunday) from 02:00 p.m. to 04:00 p.m.			

Course fee:

Rs. 20000 + 18 % Tax as per Govt. Rules. Total fees: **Rs.23600/- per participant**. Fees to be paid **through internet banking**. The bank details for on-line payment are given below:

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 fully refunded if ISI cancels the program only.

Registration:

Registrations are purely on a '**first come, first allotted**' basis. **Participants must enquire (mobile no. 9969928144 / 7738479688) for the seat availability before making the payments.** Registration should be done online through the "**Registration**" option available on the home page of our site www.isimum.ac.in . A confirmation mail will be sent after receiving of the filled-in **online registration form** and **course fees** in due course.

LAST DATE FOR REGISTRATION: 20 November 2023