On-line

Weekend

Six Sigma Green Belt Training and Certification Program

during

March 05-06, 12-13 & 19-20 of 2022 (total 6 days)

Final MCQ Test : 20 March, 2022 (Sunday) during 7:30 p.m.- 9:30 p.m. (IST)

LAST DATE FOR REGISTRATION: 01 March, 2022

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

Admission is purely on 'first come, first served' 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 (O), Email: *sqcbombay@gmail.com*
www.isimumbai.co.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 work place 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. **For registration**, participants need to download or type the attached nomination form and send it to *sqcbombay@gmail.com* after filled-in. 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** as its on-line platform. 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 has to appear in a two hours **on-line tests** with **multiple-choice questions** (MCQ type) on **20 March, 2022 (Sunday) during 7:30 p.m.-9:30 p.m.** They must score a **minimum of 60% marks** to pass the tests. Unsuccessful candidates have to appear in a **repeat test** within next 10 days, however they need not have to pay anything extra for it.

Certification:

For the **"Six Sigma-Green Belt**" certification, participants must 1) attend all the training sessions and 2) pass the Qualifying tests (MCQ type). However, participants are encouraged to carry out real-life projects using the six sigma approach. This is an **optional criterion** for GB 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

participant must submit the 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 :

Date	Session-1	Break	Session-2	Break	Session-3
05 March 2022 (Saturday)	2:00 p.m.-3:30 p.m.	3:30 p.m.-4:00 p.m.	4:00 p.m.-5:30 p.m.	5:30 p.m.-6:00 p.m	6:00 p.m-7:00 p.m.
06 March 2022 (Sunday)	9:00 a.m.-10:30 a.m.	10:30 a.m.-10:45 a.m.	10:45 a.m.-12:15 p.m.	12:15 p.m-12:45 p.m.	12:45 p.m.-2:00 p.m.
12 March 2022 (Saturday)	2:00 p.m.-3:30 p.m.	3:30 p.m.-4:00 p.m.	4:00 p.m.-5:30 p.m.	5:30 p.m.-6:00 p.m	6:00 p.m-7:00 p.m.
13 March 2022 (Sunday)	9:00 a.m.-10:30 a.m.	10:30 a.m.-10:45 a.m.	10:45 a.m.-12:15 p.m.	12:15 p.m-12:45 p.m.	12:45 p.m.-2:00 p.m.
19 March 2022 (Saturday)	2:00 p.m.-3:30 p.m.	3:30 p.m.-4:00 p.m.	4:00 p.m.-5:30 p.m.	5:30 p.m.-6:00 p.m	6:00 p.m-7:00 p.m.
20 March 2022 (Sunday)	9:00 a.m.-10:30 a.m.	10:30 a.m.-10:45 a.m.	10:45 a.m.-12:15 p.m.	12:15 p.m-12:45 p.m.	12:45 p.m.-2:00 p.m.

***Note**: MCQ type test will be on 20 March 2022 during 7:30 p.m. – 9:30 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.

Registrations are purely on a '**first come, first served' basis**. Participants must enquire (mobile no. 9969928144 / 7738479688) for the seat availability before making the payments. Registration will be confirmed only on receipt of **filled-in nomination form** (attached at the last page) and **course fees**.

LAST DATE FOR REGISTRATION: 01 March , 2022

Weekend On-Line Six Sigma Green Belt Certification Program
March, 2022 (6 days)

NOMINATION FORM

Name of the Participant (CAPITAL LETTERS): *Mr./ Ms./Dr.*

Communication Address (*Mandatory*):

E-mail* (*Mandatory*) for all future communications:

Mobile (with WhatsApp):

Organization Name (Optional):

Functional area (Optional):

Highest academic qualification:

Course Fees:

Rs.20000/- per participant +. tax @18% = ***Rs. 23600/- (To be paid through internet banking)***

Bank Details: For Online Payments

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

Amount Paid: _____ Date: _____

Bank: _____ Payment Ref. No._____

Signature:

Name: *Date:*

Please send the filled-in form to sqcbombay@gmail.com
**All the communications should be throughout a single email id only.*