



INDIAN STATISTICAL INSTITUTE

SQC & OR UNIT

CHENNAI

Announces

SIX SIGMA BLACK BELT PROGRAM

(6th April 2019 ONWARDS)

Indian Statistical Institute,
Chateau D' Ampa Complex, 1st floor,
110 (New no. 37), Nelson Manickam Road,
Aminjikarai, Chennai – 600 029

Phone No. 044-23740612 / 23740256

Web: www.isichennai.res.in

Email: sixsigma@isichennai.res.in

VENUE AND TIMINGS:

The Sessions will be held from 06th April 2019 onwards on Saturdays and Sundays during 10.00am to 5.00 pm, at Indian Statistical Institute, 110, (New no. 37), Nelson Manickam Road, Aminjikarai, Chennai – 600029. Training sessions are expected to complete by end of June 2019.

FACULTY:

Professors from Indian Statistical Institute and few dignitaries from various industries.

WHO CAN ATTEND:

- BE / B.Tech degree holder in any discipline along with MBA/MCA degree or M.Sc / B.Sc in statistics degree holders.
- Certified Green Belts from recognized certification bodies like ISI, ASQ etc.
- A candidate should have at least 3 years of experience in conducting / guiding improvement projects.

CERTIFICATION CRITERIA:

Qualifying certificate would be obtained by securing 70% marks in the tests conducted at the end of different phases during the course. The Phase I Certificate is for successful completion of training requirements. Phase II certificate will be issued only after successful completion of a six sigma BB project carried out in his/her own organization.

THE TRAINING SESSION TOPICS:

Overview of Six Sigma Methodology, Identification, Prioritization and selection of Improvement opportunities, Roles and responsibilities in Six Sigma implementation. Overview of Six Sigma Project execution (DMAIC or DFSS / DMADV) (Define – Measure – Analyze – Improve & Control or Design for Six Sigma / Define – Measure – Analyze – Design and Validate).

Development of Project Team and Charter, Define and Map Processes to be improved (SIPOC – Supplier, Input, Process, Output, Customer), Identification of Critical to Customer / Critical To Business (CTQ / CTB) characteristics, Concept of tree diagram, Voice of Customer, Concept of Quality Function Deployment.

Types of Data, Statistical Distributions – Binomial, Poisson, Normal, exponential and Weibull: Prioritization Matrix, FMEA and their use in Data Collection Planning.

Introduction to Various software packages for data display & analysis like Excel, Minitab etc.- understanding in usage & interpretation of output along with each topic, Measurement System evaluation for measurable (Gauge R&R)

as well as for attribute data (Kappa Value and Confidence interval for agreement with expert); Understanding variation – Special causes vs. Common causes (like Pareto, Bar Diagrams, Stratified Dot Plot, Stratified Scatter Plot, Box Plot, Multi-Vari Charts etc), Normality test of a data, and concept of confidence interval; Evaluation of Process Capability for Data, Concept of Short Term, Long Term Process Capability and assessment of Sigma level.

Identification of Value-Added and Non-Value-Added activities (use of lean concept), Organizing for potential causes using Cause -& -Effect diagram, FMEA & Tree Diagram; Verification / validation of causes using work place investigation (GEMBA), Concept of Test of Hypothesis like 2 Sample t, Chi Square, ANOVA etc and use of the same in validating the causes; Sample Size determination for a given confidence level; Concept of Multiple Regression and Logistic regression and use of the same in validating the causes; Concepts of Exploratory Data Analysis.

Concept of Design of experiment and details of full factorial, fractional factorial and screening designs; Generate Improvement Ideas using Creativity Techniques (Traditional & non traditional)

Evaluation of results after implementation, Monitoring the results through statistical Process Control (like Control Charts, Pre-Control Charts etc) after implementation of the solution, Monitoring the results as a part of established QMS through use of process audit, product audit and internal audits, Institutionalization and integration of the solutions, Process of Closing the Project.

PARTICIPATION FEE:

INR 75,000/- per participant (plus GST applicable).

NOTE:

1. Participation Fee includes Backpack, Course Manual, pen drive, Lunch & Refreshments.
2. Present rate of GST is 18%
4. Total fees have to be paid in full as advance payment by Cheque / Demand Draft favoring INDIAN STATISTICAL INSTITUTE payable at Chennai.

Seats are limited, enrolment on First-Come-First-Served basis

Registration starts from 25.02.2019. Registration can be made by filling up the registration form along with the participation fee.

CONTACT:

Program Director

Dr. Ravindran

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INDIAN STATISTICAL INSTITUTE

The **Indian Statistical Institute** is an autonomous organization under the Ministry of Statistics and Program Implementation, Govt. of India.

It is declared by an **Act of Parliament** as an **Institution of National Importance**.

Over the years the Institute has grown as a multi-disciplinary organization.

It functions as a **University** empowered to award degrees up to D.Sc.; as a **Corporation** in undertaking large scale projects; as a **Firm of Consultants** to industries to improve Quality, Reliability and Efficiency and as a **Meeting place** of Scientists, Economists and Literary figures from all parts of the world.

For further details, please visit website www.isical.ac.in

Role & Function of SQC & OR DIVISION, ISI

The **Pioneer and leader** in blending **statistical theory with practice** and institutionalizing the **continuous improvement process** into a sustaining system.

To disseminate the basic concepts and **techniques for Quality Improvement** by organizing Training programs, Workshops and In-house programs.

To develop **highly skilled professionals** capable of self-actualization.

To help industries in their efforts to cope up with the growing challenge of global competition through implementation of quality system based on **ISO-9000** series, **ISO-14000**, **TS-16949-2002 standards**, **Six Sigma & World Class Manufacturing**.

To continually develop and improve methodologies through **applied research** efforts to attain International Standards in services provided.

To provide **solutions to the problems** pertaining to the entire gamut of complex Business Decision Processes with the aid of **Statistics and Operations Research**.

Note: The Institute reserves the right to reschedule the Program