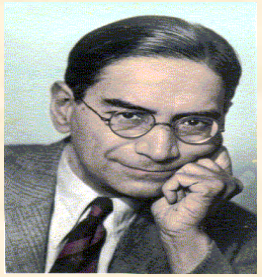
Indian Statistical Institute

SQC & OR Unit, Hyderabad



Announces

Certification Program

For

Six Sigma Master Black Belt

with a focus on

Advanced Statistical Methods

June – Sept., 2010

Saturdays & Sundays

(Halfdays, Part-Time and Non Residential)

Registration / Nomination Form

Street No 8, Habsiguda, Hyderabad – 500007

Phone: (040) 27153984/2171906 Fax: (040) 27173602

Website: www.isihyd.ac.in Email: ssmbbhyd@isihyd.ac.in

Introduction | Eligibility Criteria | Certification Criteria | Program Fee | Contact Details | Curriculum | About the Institute

Introduction

Indian Statistical Institute, Hyderabad announces a certification program for "Six Sigma Master Black Belt" with a specific emphasis on Advanced Statistical Methods during June – September 2010. The program will be extremity useful to the executives associated with quality & related functions to introduce breakthrough improvements by building a strong Six Sigma resource & structure with the needed expertise in problem solving and statistical methods for achieving business excellence.

Six Sigma Master Black Belt (MBB)

Master Black Belts (MBBs) are the future leaders of any organization implementing Six Sigma. They are the locus/center or key change agents of any Six Sigma initiative. They install a new mindset of driving business improvements through statistical thinking, building statistical skill sets, and a structured/disciplined project execution approach that helps a organization towards achieving Business Excellence. They have the advanced Statistical knowledge and experience of applying Six Sigma in a lean & mean way. They have the capability to teach statistical methods in the most optimal and effective way such that Six Sigma & statistical thinking becomes a way of doing business in the whole organization. Master Black Belts facilitate project selection and project reviews, mentoring, teach and lead Black Belts and Green Belts to successful project completion. They consistently deliver exceptional bottom line savings and top line growth for the company by consistently solving the toughest business problems.

Eligibility Criteria

Graduate/Diploma in any discipline

AND

Successfully completed the Part-Time Certificate Course of Indian Statistical Institute (6 months) OR at least six months specialized training in Quality Management science recognized Institution. OR Undergone Six Sigma Black Belt / Advanced Green Belt Training from a reputed Institution /Organization /Association /Certification bodies etc.

AND

Minimum of 2 Years experience in Quality or related function and having the responsibility of conducting trainings on Quality Management/Tools & Techniques / executing/guiding/mentoring improvement projects.

AND

Executed a minimum of 2(two) Quality/productivity improvement projects.

Certification Criteria

Participation Certificate

1. Minimum 75% attendance
2. Minimum 80% Marks in the test (conducted at the end of the program)
3. Submitting all the assignments given by faculty from time to time

MBB Certificate

4. Submitting the Executive Summary & Presentation Slides of **3 (Three)** Improvement Projects guided/mentored
5. A proof of adequate credential indicating a minimum of **60** hours of teaching in Quality related topics.
6. Attended at least **ONE** conference/workshop/seminar on Quality related topics and Published/sent for publication at least **ONE** paper in a reputed Journal/conference/news letter etc.
   (Criteria 4, 5 and 6 need to be fulfilled/completed within 12 months of undergoing the classroom training)

Program Fee : **Rs 40,000/- (per participant)** (Includes program kit, Tea/Coffee with biscuits/snacks on the days of the program)

Discount (per participant)

a) Client / Member organizations having association with the Institute : Rs 5,000/-

b) Self-sponsoring individual participants : Rs 5,000/-
   (in addition Rs 5,000/- discount will given to those participants who attended full time/part-time academic course/training of the Institute)

c) Group Participation (3 or more participants from the same Organization) : 5% on Total

In addition applicable Service Tax & education cess as stipulated by Govt. of India (Presently 10.30%) to be paid on the Program fee.

Payment Mode

Selected/eligible candidates need to pay the fee along with the applicable taxes in full at the beginning of the program (Part payment is not acceptable) in the form of **Demand Draft drawn in the favour of Indian Statistical Institute, Payable at Hyderabad.**

Venue : Lecture Hall, Indian Statistical Institute, Hyderabad

Inauguration : 1900 hrs (7 PM) on 29th June 2010 at Indian Statistical Institute, Hyderabad
(on the occasion of Birthday celebrations of Late Prof. P.C. Mahalanobis and Statistics Day)

Regular Classes : 3rd July to 25th September 2010 Only on Saturdays & Sundays (25 days)
MBB Examination – 26th September

Timings : Saturdays – 0900 to 1330 and Sundays - 1400 to 1830

Application/Nomination Procedure

Registration / Nomination need to be sent in the Program Facilitator in the prescribed format.

Last date

Receipt of Registrations / Nominations : **18th June 2010**

Notification of acceptance : **25th June 2010**

For any further details Contact / Mail :

ssmbbhyd@isihyd.ac.in or

(040) 27153984 / 27171906

K Venkata Ramana
Program Facilitator
vrkota@isihyd.ac.in

G Murali Rao
Program Director
gmuralirao@isihyd.ac.in

Curriculum
(Body of Knowledge)

(Indicative and not exhaustive)

Note : The program will be conducted with appropriate allocation of time/effort to teaching, hands on sessions/case discussions and participants involvement in group discussions/guided teaching

- Six Sigma & Statistical Thinking
- An overview of Six Sigma methodologies, DMAIC & DFSS
- Master Black Belt – The central Pillar of Organizational Excellence
    - Roles & Responsibilities of Six Sigma MBB
    - Train the Trainer – Traits of a motivating teacher/trainer
    - Skills required, Six Sigma, Statistical & management.
    - Project Selection, Planning, guiding/mentoring, implementing & sustaining.
- An overview of Basic Statistics & Six Sigma Tools & Techniques
    - Descriptive Statistics
    - Theory of Probability & Probability Distributions
    - Normal, Binomial, Poisson Exponential, Weibull, Log Normal etc.
    - Product & Process Characterization
    - Measurement System Analysis (Continuous & Discrete)
    - Stability Diagnostics & Analysis
    - Statistical Process Control
    - Process Capability Analysis
    - Performance Evaluation - Sigma Level

- Statistical Methods for decision Making - Inferential Statistics

    - Theory of Estimation
    - Sampling Distributions
    - Tests of Mean, Standard deviation, proportions & Contingency tables.
    - Chi-square test for Independence & Goodness of Fit.
    - Confidence Intervals & their applications
    - Non Parametric Tests
    - Analysis of Variance, Generalized Linear Models etc.

- Regression Modeling

    - Correlation & Regression Analysis, Different modeling methods
    - Regression Diagnostics
    - Logistic Regression Models etc.
    - Classification And Regression Tree (CART) Analysis

- Multivariate Data Analysis

    - Principal Component Analysis
    - Discriminant Analysis
    - Factor & Cluster Analysis
    - EDA & Data Mining techniques etc.

- Reliability Analysis

    - Distribution Analysis
    - Reliability Models
    - Accelerated Life testing
    - Probit analysis etc.

- Design and Analysis of Experiments
    - Basic Designs
    - Factorial & Fractional Factorial Designs
    - Response Surface Methodology
    - Mixture Designs
    - Taguchi Methods & OA designs.
- Time Series Analysis
    - Graphical Analysis of Time Series data
    - Smoothening Methods
    - Different Time series models.
- Lean Manufacturing & Lean Six Sigma
    - Introduction to Lean Manufacturing/Six Sigma
    - Value Stream Mapping
    - Lean Tools & Techniques
    - Implementation of Lean
- Other optimization / Improvement techniques (overview)
    -
    - Operations Research Methods
    - Theory of Inventive Problem Solving (TRIZ)
    - New Seven Management Tools

About the Institute

The Indian Statistical Institute (I.S.I.), founded by Professor Prasanta Chandra Mahalanobis, grew out of the Statistical Laboratory set up by him in the Presidency College in Kolkata in the year 1931. In 1959, in recognition of the role of statistics as a key technology of the modern times and the importance of the Institute in the development and application of statistics, the Parliament of India enacted the Indian Statistical Institute Act, declaring it an Institution of National Importance. The Institute is now considered as one of the foremost centres in the world for training and research in statistics and related sciences. In keeping with this long tradition, the Institute has been engaged in developing statistical theory and methods and their practical applications in various branches of science and technology.

The major objectives of the Institute, as given in its Memorandum, are

to promote the study and dissemination of knowledge of statistics, to develop statistical theory and methods, and their use in research and practical applications generally, with special reference to problems of planning of national development and social welfare;

to undertake research in various fields of natural and social sciences with a view to the mutual development of statistics and these sciences;

to provide for, and undertake, the collection of information, investigation, projects and operational research for purposes of planning and the improvement of efficiency of management and production.

The Institute initiated the Quality Movement in India as early as 1947. Through its SQC & OR Division the Institute is providing assistance to Indian industry relentlessly since then to achieve high quality and productivity at an affordable cost.

About the SQC & OR Unit, Hyderabad

The Statistical Quality Control and Operations Research (SQC & OR) Unit at Hyderabad of the Indian Statistical Institute was established in the year 1974 with the objective of helping industries in Andhra Pradesh and also industries of other states close to Hyderabad for promoting and propagating statistical and quality management methodologies.

The SQC & OR Unit, Hyderabad is one of the major Units of the SQC & OR Division of the Indian Statistical Institute. SQC & OR Division was created by Professor Mahalanobis exclusively for helping the Indian industries in managing quality and productivity problems with the application of Statistical as well as Quality Management methodologies.

SQC & OR Unit, Hyderabad has immensely contributed to the SQC & OR Division's activities such as

- Playing a pioneering role in the Quality Movement in India and setting path for quality control and improvement activities for the Indian industries through promotion and applications of statistical and operations research methodologies.
- Serving the industries in India and abroad over the last five decades by providing training and consultancy on quality concepts and methodologies such as TQM, Taguchi Methods, Quality Function Deployment, Six Sigma, and Quality Systems.
- Collaborating and exchanging ideas with quality gurus. Some experts like Shewhart, Deming, Juran, Taguchi, Ishikawa, Ott, Tippet and Suda visited ISI at various points of time and interacted with ISI faculty.

A large number of Manufacturing, Service, IT, BPO & KPO industries have been benefitted by the services of SQC & OR Unit Hyderabad. Reliance, ITC, Wipro, HSBC, BHEL Dr. Reddy's etc. to name a few.

Indian Statistical Institute, SQC & OR Unit, Hyderabad

Certification Program for
Six Sigma Master Black Belt (with a focus on Advanced Statistics)
(June – September 2010)

Registration / Nomination Form

1. Participant (s) Details

Sl. No	Name	Organization	Designation	Age	Highest Qualification	Years of Experience (Six Sigma/Quality)
1						
2						
3						

2. The following details need to be provided for each participant

a. Brief (max : one or two pages) resume of the participant describing his/her experience in Six Sigma/Quality/Application of Statistical Methods related areas. The write-up need to capture (i) Project execution by self (ii) Guidance of Improvement projects. (iii) Training programs (Six Sigma/Quality) attended. (iv) Teaching/Training hours delivered in BB/GB/other quality related programs.

b. Title and one page write up (Executive Summary / Abstract) for each of the Six Sigma/Improvement Projects executed (Minimum Two)

c. Photo copy of the Six Sigma Black Belt/Advanced Green Belt/ Statistics or Quality related Academic/Teaching/Training Programs.

3. Details of Program Fee

No. of Participants	Program Fee	Discounts Availed (if any)	Payable Program Fee	Applicable Taxes	Draft Amount	Draft No. & Date

4. Contact Details : **Postal Address**

Mobile : Email :

Name & Signature