

# INDIAN STATISTICAL INSTITUTE



Prospectus for

## **PART-TIME CERTIFICATE COURSE** *In* **STATISTICAL QUALITY CONTROL**

*With*

## **SIX SIGMA GREEN BELT**

*(February – October 2020)*

*(Week-End Module: Bangalore)*

Contact

**SQC & OR Unit,**

**Indian Statistical Institute**

**8th Mile, Mysore Road,**

**Bangalore 560 059.**

Phone : +91 80 26985 402 / 400

Telefax : +91 80 2848 4910

Web : [www.isibang.ac.in](http://www.isibang.ac.in)

# INDIAN STATISTICAL INSTITUTE

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## Objectives

Indian Statistical Institute, a non-profit distributing Learned Society was registered on 28 April 1932. Its principle being:

*“to promote the study and dissemination of knowledge of the research on Statistics and other subjects relating to planning for national development and social welfare; to provide for and undertake the collection of information, investigations, projects and operational research for purposes of planning and the improvement of the efficiency of management and production”.*

## Nature of Activities

Since its inception, the Indian Statistical Institute has been carrying out an integrated programme which, centres on practical applications of statistics through project work. Such applications of statistical methods have continually thrown up problems of theoretical or mathematical interest, whose solution has led to original contributions to statistical theory.

## General

The Institute which has been recognised as an Institution of National Importance by an Act of Parliament enjoys the status of University and is empowered to confer degrees in Statistics. It has won international renown as a leading institution in the field of Statistics and its applications.

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## PART TIME CERTIFICATE COURSE in STATISTICAL QUALITY CONTROL

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### 1. Introduction

**Statistical Quality Control (SQC)** has acquired great significance in India in the context of rapidly growing industrialisation and economic activity and the corresponding need to make the best possible use of domestic resources for the manufacture of goods and services of high quality at low cost and to sell such products at competitive prices in the world market. Consequently, there has been a growing demand from the industry for persons trained in techniques and approach of SQC. To meet this, the Indian Statistical Institute has established training bases at Kolkata, Mumbai, Bangalore, Delhi, Hyderabad, Chennai, Coimbatore and Pune.

In order to have the competitive edge in the market, many organizations are implementing ISO / TS / CMM / Six Sigma activities. There is a crying need for manpower who are adequately trained in the Statistical Techniques required for these activities.

In order to ensure speedy growth of Quality Movement in the country, apart from imparting training to the Executives of the top managerial echelon, a substantial portion of training efforts will have to be directed towards middle and operations management cadres.

The present course that leads to a **Certificate in Statistical Quality Control** is designed to fulfil the above need. In addition, successful candidates will be provided with **Six Sigma Green Belt** certification. It will be particularly useful to persons employed in the Middle / Operational level belonging to any functions in Industrial, Commercial and Scientific institutions.

## **2. Scope**

The course is intended to provide intensive training in theory and practice of SQC. Emphasis would be on equipping the students with basic practical skills in SQC approach with sufficient theory to understand the principles involved to develop in them the power of systematic thinking, practical approach and exposition.

Classroom lectures will be supplemented by case studies, tutorials, home assignments, seminars and group discussions.

It is compulsory that each candidate shall undertake a project work on live problems in their respective organisations during regular working hours as part of the course. The ISI will assist the participants in formulation of project work in consultation with respective management, and provide general supervision/guidance. For the award of the Certificate, the candidate should satisfactorily complete the practical work and submit the report.

The Course covers basic Statistical Techniques for ISO / TS / Six Sigma.

Additional sessions are conducted on Six Sigma to enhance knowledge and skills of the participants.

## **3. Duration**

The course extends over a period of about 9 months from **February to October, 2020**.

Classes will generally be held on

**Saturdays: (14:00 to 18:00 hrs) and Sundays: (09:30 to 13:30 hours).**

## **4. Venue**

Indian Statistical Institute; 8th Mile, Mysore Road, Bangalore - 560 059.

## **5. Eligibility**

- i Admission is restricted to persons studying/working in Industrial, Commercial or Scientific Organisations whose candidature is sponsored by their organizations.
- ii Minimum educational qualifications are any one of the following:
  - a. Diploma in any branch of Engineering or Technology from a recognised Institution.
  - b. Bachelor's degree (with mathematics at least up to the PUC level or equivalent) from a recognised University or Institution.
- iii The sponsoring organisation must ensure:
  - a. Regular attendance of their candidate at the classes.
  - b. Adequate opportunities for the candidate to carry out the project work on some problem of interest to them.
  - c. Transport facilities and hospitality to the visiting faculty for supervising the project work.

## **6. Admission**

For admission to all its programmes, the Institute follows a policy consistent with the national policy on reservation for candidates from the Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Classes (OBC) and Differently Abled (DA) categories (collectively referred to as reserved categories). Reservation of Seats for *Scheduled Caste / Tribe (SC/ST) Candidates* : 22½% of the numbers of seats in this programme are reserved for candidates belonging to SC/ST (15% for SC and 7½% for ST). Reservation of Seats for *Other Backward Classes - Non Creamy layer- (OBC-NCL)* : 27% seats of the numbers of seats in this programme will be reserved for the candidates belonging to OBC.

Reservation of Seats for Differently Abled (DA) Candidates: Three percent (3%) of seats will be horizontally reserved (that is, in each category (ST, SC, OBC and GEN)) for differently abled (DA) candidates. The benefit of reservation will only be given to those who have at least 40% physical disabilities. A candidate belonging to the DA category will get a relaxation of 30% on the General Qualifying Score at each stage of the selection process. Such candidates will be required to produce original certificate issued by district medical board/competent authority at the time of the written test.

Applications in prescribed form should be sent to

Teacher-in-Charge,  
PTC : January 2020 batch,  
SQC & OR Unit, Indian Statistical Institute,  
8th Mile, Mysore Road, Bangalore 560 059.

Attested copies of the following should accompany the applications:

- a) Degree/Diploma/ along with statement of marks, 10<sup>th</sup> & 12<sup>th</sup> Standard Board exam Marks cards.
- b) Certificate of age, and
- c) Applicable Certificates for SC/ST/OBC/DA candidates

Each application should be accompanied by

- a) DD of Rs. 100/- drawn in favour of the "Indian Statistical Institute", payable at Bangalore, OR
- b) Pay cash of Rs.100/- on or before the day of the written test.

Last date of receipt of filled up application: **17 January, 2020.**

**[Note: Applications incomplete in any way will be rejected]**

**Date of written Test (tentative): 03 February, 2020. Time: 2-00 pm.**

**Venue: SQC & OR Unit, ISI, Bangalore.**

## **7. Tuition Fees**

A tuition fee of **Rs. 10,000/- + Rs. 1,000/- (Payable through DD only)** for course material payable in one instalment at the time of admission. This fee is non-refundable under any circumstances.

*[Note: This would be collected from the SELECTED candidates only, after the Merit List is published ; NOT with the application form]*

## **8. Scheme of Instruction**

- i. Classes will generally be held on **Saturdays (14:00 to 18:00 hrs)** and **Sundays (09:30 to 13:30)**.
- ii. The course comprises of lectures, practical exercises, assigned reading, home tasks, tutorials, seminars, group discussions and project studies.
- iii. Project work will run concurrently outside the class hours in candidate's own organization.
- iv. Teaching faculty will consist of specialists from the SQC & OR Unit and experts in different areas.

v. Teaching faculty will also guide the students in their project studies.

## **9. Examinations**

### **a) For the Certificate in Statistical Quality Control:**

- i. Each candidate's performance shall be judged through classroom exercises, home assignments, periodical tests, final examination and project report.
- ii. The final examination shall be conducted by a Teachers' Committee consisting of the teaching faculty and external experts on four days either during the regular working hours of the Institute or during weekends.
- iii. The final examinations will be held during the months of November / December same year. Each candidate must submit the Project Study Report at least one week before the commencement of the final examination, failing which, he/she will not be allowed to write the final examination.
- iv. Each candidate shall be awarded marks in respect to the following **4 subjects**:

<b><u>Paper</u></b>	<b><u>Subject</u></b>	<b><u>Maximum Marks</u></b>
<b>I.</b>	<b>Statistical Methods</b>	<b>100</b>
<b>II.</b>	<b>SQC Techniques (Theory)</b>	<b>100</b>
<b>III.</b>	<b>SQC Techniques (Practical)</b>	<b>100</b>
<b>IV.</b>	<b>Project Work</b>	<b>100</b>

- v. The percentage marks obtained in the home assignments, periodical and final examinations are combined in the ratio 1:1:3 to obtain a single percentage score for each student in each paper.
- vi. A candidate shall be declared to have passed the course if he fulfils all of the following:
  - a. Has a minimum attendance of 75%**
  - b. Has carried out the project work**
  - c. Has a satisfactory conduct**
  - d. Has no composite score of less than 25%**
  - e. i) Obtains not more than one composite score below 45%**  
**ii) Has an overall composite score of 45% or above.**
- vii. A candidate will be declared to have passed with distinction if he fulfils the condition, a, b, c in rule (vi) and obtains 60% or above in all the 4 papers.
- viii. A failed candidate or a candidate who does not appear for the final examination will be permitted to appear in the final exam. to be held for the next batch. This shall be his last chance. Grades shall be awarded to him based purely on the marks obtained at this examination.
- ix. A candidate absent at a periodical test may be allowed to write a supplementary Periodical Test.
- x. Normally, fees are not charged for the periodical tests or the final examinations. However, a fee of Rs. 100/-(Rs. One Hundred only) per test shall be charged for those writing Supplementary Periodical Tests.

**b) For the Six Sigma Green Belt:**

Candidates will be certified after successfully passing the applicable test.

**10. Award of Certificate**

A candidate who is declared to have passed the course will be awarded the **Certificate in Statistical Quality Control**.

In addition, successful candidates will be provided with **Six Sigma Green Belt** Certification.

**11. Contact**

**Teacher-in-Charge:**

Ishteaqul Islam

E-mail: [islam2060@gmail.com](mailto:islam2060@gmail.com)

Phone: (+80) 2698 5422

**Office:**

R Kalyanaraman

E-mail: [kalyan@isibang.ac.in](mailto:kalyan@isibang.ac.in)

Phone: (+80) 2698 5402

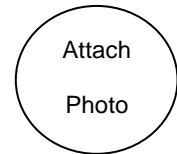
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INDIAN STATISTICAL INSTITUTE  
8<sup>th</sup> Mile, Mysore Road,  
Bengaluru 560 059

**APPLICATION FORM:**  
**PART-TIME CERTIFICATE COURSE IN SQC**  
**With Six Sigma Green Belt**  
**(February – October, 2020 Batch)**



Application Fee: Rs. 100/- **Thro' DD\* (or Cash)**  
(\* Favouring "Indian Statistical Institute" Payable at Bangalore  
Last Date: 17 January, 2020

1. **Full Name** (block letters): .....
2. **Sex** :  Male/ Female / Other      3. **Category** :  SC\*/ ST\*/ OBC\*/ DA\*/ Gen  
(\* Attach Certificates)

4. **Date of Birth**:   DD      MM        YYYY

5. **Sponsoring Organization and Address:**

6. **Address for Communication::**

7. **e-mail:**

8. **Mobile:**

9. **Academic Record:**

Examination Passed	Year of Passing	Subjects	Class/ Division	University/ Institution	Any Other Info.
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School final/  
S S L C

Pre-University/  
Intermediate

Diploma

Bachelor's  
Degree

Master's  
Degree

Others

**10. Have you applied for any other course** conducted by the Indian Statistical Institute?

Yes /  No. **If yes,** State the Course / Year .....

**11. Employment Status:**

a. Designation .....

b. Function/Department .....

**12. The following certified copies are enclosed with the application:**

a.

b.

c.

d.

**13. Declaration :**

The above particulars submitted by me are correct. If admitted, I will not leave in the middle of the course or engage myself in any activity which may hamper the progress of my studies.

Place:

Date:

.....  
Signature of the applicant

**14. Statement by sponsoring organization:**

a. If selected for admission, the applicant will be available to undergo the course.

b. Facilities will be made available for project study by the candidate at our organization during his normal working hours.

c. Transport and hospitality will be provided to the visiting faculty in connection with the project study guidance.



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Signature of Sponsor

Name :

Designation :