



**INDIAN STATISTICAL INSTITUTE
SQC & OR Unit
HYDERABAD**

Announces

Online Course

**Machine Learning using Python
(12 half-days : 2.00 pm – 6.15 pm)**

**04 - 07 Oct, 18 - 21 Oct
&
25 - 28 Oct 2021**

**SQC & OR UNIT
INDIAN STATISTICAL INSTITUTE**

Road No.8, Habsiguda
Hyderabad – 500 007

Phone: 040 2715 3984
040 2717 1906
040 2717 9402

FAX : 040 2717 3602

e-mail : daisihyd@gmail.com

Website : www.isihyd.ac.in

Program Objectives

To equip professionals with the capabilities in extracting implicit, previously unknown and potentially useful knowledge from large datasets

Program Benefits

Participants will acquire knowledge on

- Data summarization, visualization, aggregation and preprocessing
- Application of unsupervised learning techniques
- Application of supervised (predictive modeling) learning techniques
- Evaluating model significance, accuracy, adequacy and generalizability
- Additionally, gain hands-on experience on the usage of open-source package Python

Eligibility

Any science or engineering graduate working in the analytics field or aspiring to get into analytics can participate in the program. The knowledge of a programming language is desirable but not essential.

Course Content

| Module | Topic |
|----------|--|
| Module 1 | Introduction to Analytics, Descriptive Statistics, Introduction to Python, Data Summarization and Aggregation Techniques |
| Module 2 | Missing Value Handling, Data Merging and Appending, Data Scaling / Transformations |
| Module 3 | Test of Hypothesis, Normality Test, Analysis of Variance, Cross Tabulation and Chi Square Test |
| Module 4 | Correlation, Multiple Linear Regression, Dummy Variable Regression, Binary Logistic Regression |
| Module 5 | Factor Analysis, Cluster Analysis |
| Module 6 | Classification and Regression Tree, Bagging, Random Forest |
| Module 7 | Naïve Bayes Classification, k Nearest Neighbor Method, Support Vector Machines |

The course material and data sets will be shared with the participants.

Certification criteria

Qualifying Certificate by complying with all of the following three requirements.

- i) Minimum 85% Attendance during the course.
- ii) Class room Exercises and submission of Assignments given during the course period.
- iii) Securing 75% Marks in the TEST conducted on 28th October 2021.

Faculty

Senior Specialists from Hyderabad and Bengaluru branches of Indian Statistical Institute.

Course Fee

Rs. 15,000 + GST@18% (i.e., Rs. 17,700/- per participant)

Payment Options:

- i) *Demand Draft drawn in favor of INDIAN STATISTICAL INSTITUTE payable at Hyderabad.*
- ii) *Online Transfer : Canara Bank (formerly Syndicate Bank), JSN Colony Branch, Habsiguda, Hyderabad.*
Name of Account holder : Indian Statistical Institute,
Current A/c No : 30451010000079, IFSC Code : CNRB0013045

Participants making payment through 'Online transfer' shall first fill-up the Registration Form (attached herewith) and mail it to us. Then they will receive a confirmation of participation. However, payment of Course Fee has to be made only after receiving communication from us which is likely during 15 – 27 September 2021.

Last date

Last date for submission of Registration form : 27th September 2021 (Subject to availability of seats). Registration is on first-come-first-served basis.

Program Director

Dr. S M Subhani
Mobile : 98493 23071

Program Facilitator

Mr. K Venkata Ramana
Mobile : 98492 95892

INDIAN STATISTICAL INSTITUTE

The INDIAN STATISTICAL INSTITUTE founded by Prof. P C Mahalanobis, FRS, is an Institution of National Importance, declared by Act of Parliament and funded by Government of India. It is an Institute of academic excellence offering educational courses at Graduate, Post graduate and Research levels. The scientific activities of the Institute are carried out through different Divisions.

Role of SQC & OR Division

- The Pioneer and Leader in blending Statistical Theory with Practice.
- To disseminate the basic concepts and techniques of Quality Improvement through Training programs, Workshops and In-house programs.
- To render Training, Consultancy services to industries in SQC, Six Sigma (GB, BB & MBB), ISO 9001, ISO 14001, ISO 45001, IMS(ISO 9K/14K/45K), ISO/TS 16949 and related areas.
- To provide solutions to the problems pertaining to Business Decision Processes with the aid of Statistical and Operations Research methods.

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Online Course on
Machine Learning using Python
(12 Half days: 2.00 – 6.15 p.m.)

04 - 07 Oct, 18 - 21 Oct & 25 - 28 Oct 2021

REGISTRATION FORM

Organization :

Contact Person :

Mailing Address :

Phone : (M)

(O)

(R)

e-mail :

FAX :

Participant(s) details :

| S No. | Name | Designation & Department | e-mail | Mobile |
|-------|------|--------------------------|--------|--------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

*Note : i) Course Fee per participant is Rs. 17,700/- (which includes GST@18%.)
ii) Typed copy of this form may be used in case of more participants.
iii) Participants making payment through 'Online transfer' shall first verify the availability of seats, and make payment only after confirmation from us.*

Amount:

Online transaction reference No.:

Date:

DD No.:

Bank & Branch :

Signature:

Date:

Please e-mail, post or FAX the filled in form addressed to the Program Director to our office address given above.