

## 2<sup>ND</sup> ONLINE SHORT-TERM TRAINING PROGRAM (STTP)

### ON DATA SCIENCE AND STATISTICAL ANALYSIS THROUGH R AND PYTHON SOFTWARE

29 MAY - 02 JUNE, 2024



Organized by

Department of Mathematics, S. V.  
National Institute of Technology,  
Surat -395007, Gujarat, India

In Association with the CCE, SVNIT



## ABOUT SVNIT

The Institute, one of the pioneering engineering institutions of the country, was established in 1961 as Sardar Vallabhbhai Regional College of Engineering & Technology and was given a status of National Institute of Technology, in 2002. At present, there are Seven undergraduate courses, Eighteen postgraduate courses, Three M.Sc. Five years Integrated Program and PhD program in all disciplines of engineering and applied sciences. It has an excellent placement record with a number of top- ranking companies visiting the campus. The whole campus has connectivity of the internet with fiber optic network including faculty quarters and student hostels.

The Department of Mathematics has always believed in striving for excellence in research and teaching and succeeded in this endeavor to a large extent. Over the years, the department has evolved as one of the epicenter of research in Gujarat, India.

In the pursuit for research the Faculty members of the department have covered a vast area such as Probability & Statistics, Algebra, Coding theory, Numerical & Classical methods in fluid mechanics, Special functions, Integral Transforms, Approximation theory, Operator theory and Fuzzy logic, Mathematical Modeling, Numeric of differential equations, fractional differential equations, Mathematical and Computational Biology, Bioinformatics, Techno innovation to Techno entrepreneurship, General Management, Entrepreneurship, Marketing.

## ABOUT CCE

Center for Continuing Education (CCE) was established in Feb-2017 at SVNIT with Prime objective to imparting skill developing training programs to faculty, research scholars, UG/PG students, industry professional through planning and organizing Workshop/STTP/Expert talks on the concept of Self-Sustainability approach as per MHRD Guide-lines

## PATRON

Prof. Anupam Shukla  
Director, SVNIT, Surat.

## CHAIRMAN

Dr. Jayesh M. Dhodiya  
Associate Professor & HOD  
Department of Mathematics,  
SVNIT, Surat

## COORDINATORS

Dr. Raj Kamal Maurya

Dr. Sourav Gupta

Dr. Shivam Bajpeyi

Assistant Professor  
Department of Mathematics,  
SVNIT, Surat

## PROGRAMME OBJECTIVE

In this world of overloaded information and data explosion, there is a need to leverage this data and make sense of it entirely. R is rapidly becoming the leading programming language for effective data analysis and statistics. R Programming is a training program that aims at building a skill-set towards real-world data analysis.

Since the data science industry is rapidly expanding. Data volume can be large due to which difficulties arise in handling the data and the whole procedure will be much more time consuming. In this case the Python is a very popular tool in scientific computing, because it has many data-oriented feature packages that can speed up and simplify data processing.

This training program is targeted at Bachelor, Master, PhD students, Post-docs, Faculties, Engineers & Researchers from numerous areas of science and technology. In these five days course, first three days aims to introductory sessions followed by basics of R software in statistics and data analysis. The speaker will introduce Python software for data analysis over next two days. The data analysis based on several important topics will be covered by the speakers.

### You will Learn ...

- ✧ Distribution (random variables) discrete and continuous, Random number generation using R, Goodness of fit-test, Statistical test (KS distance, Chi-square test, F-test etc.), AIC/BIC conditions, Confidence intervals (point and interval estimates), MLEs, MH Algorithm, Survival Analysis , Different plots, MCMC.
- ✧ Encoder-decoder, Word embedding, Tokenizer, Attention Mechanism, Fine tune llms, Applications of llms.

## WHO CAN ATTEND

Though there is no limit, this training program is open to Industry persons, Research scholars, Postdocs, UG and PG students.

### Notice:

Participants are advised to keep laptops for hands-on practice during all sessions.

## EXPERTS & TUTORS

❖ **Dr. Ritwik Bhattacharya**  
University of Texas at El Paso, USA

❖ **Dr. Tanmay Sen**  
Data Scientist at Ericsson, Kolkata

❖ **Dr. Chandrakant Lodhi**  
Energy Institute Bengaluru, a centre of RGIPT

❖ **Mr. Vaibhav Shakya**  
Data Scientist at CDAC, Pune

## REGISTRATION

### Details of account for Program Fee Submission:

Account Holder Name: **Director, SVNIT-CCE**

SBI Account Number: **37030749143**

Branch Name: **SBI, SVRCET**

Branch Bank IFSC: **SBIN0003320**

**NOTE:** Please mention “**DOM\_STTP\_2024**” in the description/ remark during payment and attach payment proof while registering through Google Form.

**Online Registration link:**

[Click here for Registration](#)

The certificate of participation will be issued to all candidates after completion of the program.

**Last Date of Registration : 10-05-2024**

### Registration Fee

(Non-Refundable)

**UG/PG/Ph.D. Scholars** **590/-**  
(500+18% GST)

**Ph.D./Postdoc** **826/-**  
(700+18% GST)

**Faculty** **1180/-**  
(1000+18% GST)

**Industry Delegates** **2360/-**  
(2000+18% GST)

## ORGANIZING COMMITTEE

**Patron:** Prof. Anupam Shukla

**Chairman:** Dr. Jayesh M. Dhodiya

### Coordinators:

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### Contact Details of Coordinators:

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