

**Speakers** 

Professor (Dr) Dibyojyoti Bhattacharya Head of Department of Statistics & Director, Internal Quality Assurance Cell, Assam University



Dr. Tripti Singh (PhD Allahabad University) Associate Professor and Head SMS MNNIT Allahabad



Dr. Gaurav Kabra (PhD IIT Roorkee) Assistant Professor NITIE Mumbai



Dr. Priyanka Sharma (PhD IIT Kanpur) Assistant Professor (Marketing Group) IIM Lucknow



Dr. Saurabh Mishra (PhD IIIT Allahabad) Assistant Professor SMS MNNIT Allahabad

## Patron

Prof. Rajeev Tripathi
Director
Motilal Nehru National Institute of Technology
Allahabad (Prayagraj)

# Chairperson

Dr. Tripti Singh
Associate Professor and Head
School of Management Studies
Motilal Nehru National Institute of Technology
Allahabad

Phone: 91-532-227-1550 (O) Email: tripti@mnnit.ac.in

## **Coordinators**

Dr. Saurabh Mishra Assistant Professor

Email: saurabhmishra@mnnit.ac.in

Dr. Yatish Joshi Assistant Professor Email: yatish.joshi@mnnit.ac.in

Dr. Somen Dey Assistant Professor Email: <a href="mailto:somen@mnnit.ac.in">somen@mnnit.ac.in</a>

School of Management Studies Motilal Nehru National Institute of Technology Allahabad

# **Short Term Training Program (STTP) on**

Data Analytics and its Applications in Management (DAAM) February 04-08, 2020



Organized by

School of Management Studies, Motilal Nehru National Institute of Technology Allahabad



Dr. Somen Dey (PhD IIT Kanpur) Assistant Professor SMS MNNIT Allahabad



Dr. Yatish Joshi (PhD IIT Roorkee) Assistant Professor SMS MNNIT Allahabad

### **About the course**

In this age of Information, it is believed that information leads to power and success, and with the aid of the sophisticated technologies, we have been collecting tremendous amount of information. Confronted with huge collections of data, we have now created new needs to help us make better managerial choices. These needs are automatic summarization of data, extraction of the essence of information stored and the discovery of patterns in raw data. With the enormous amount of data stored in files, databases, and other repositories, it is increasingly important to develop powerful means for analysis and interpretation of such data and for the extraction of interesting knowledge that can help in decision-making in different domains of Management Science i.e. Marketing, Finance, Operations, and Human Resources.

# **Objectives**

To understand the various data mining/data analytics tools and its implications in different domains of management.

To provide hands on exposure on various data analytics software such as R by working on real life managerial problems.

To appreciate the importance of data science in business decision-making and its implications in research.

## **Pedagogy**

The program would be a mix of lecture; in hand lab session and experience sharing between participants and resource persons.

# **Key benefits**

After attending this programme the participants will be able to understand the basics of data analytics. The participants will be able to solve the problems in different areas of data analysis using new and existing tools.

### Accommodation

Accommodation will be provided to the willing participants on payment of requisite fees and subject to availability of rooms in the guest house of the institute on twin sharing basis. MNNIT has state of art guest house with all modern amenities.

## Venue

School of Management Studies, Motilal Nehru National Institute of Technology, Allahabad, Prayagraj

# Registration

Participants	Without Accommodation
For Industry Professionals	INR 5,000
For faculty members	INR 4,000
For Research Scholars/Students	INR 3,000

Kindly visit the following link for downloading the registration form and payment of fees.

For further queries: +91-7761923480/8958912566

Link: <a href="https://www.smssttp.com/">https://www.smssttp.com/</a>

Last date of registration is 25th January, 2020

# **About the Department**

The School of Management Studies, Motilal Nehru National Institute of Technology, Allahabad was constituted with the philosophy of running and managing the programmes with a focus on Management and Technology. It is propelling academic excellence through innovative pedagogy of blended learning inculcating all round self-development by creativity, knowledge exchange, empowerment and enrichment of students and faculty members.

### **COURSE MODULES**

**Data Mining and its Applications:** Summarizing business data, data pre-processing and reduction methods, data visualization and tools

Data Analytics and Visualization through R: Introduction to R /R studios-GUI concepts, concept of packages-useful packages (base and other packages), Data Structure & Data Types (Vectors, Matrices, factors, Data frames and Lists). Importing and Exporting Data from other Software. Common Statistical/algebraic functions in R

Analysis with R: Descriptive statistics, frequency tables and summarization, univariate analysis (distribution of data and graphical analysis), bivariate analysis (cross tabs, distributions and relationships, graphical analysis), creating graphs (bar, pie, line, histogram, box, scatter, density), Regression Analysis in R. Topic Modeling, Literature review and bibliometric analysis through R.

**Text Analytics and Web Analytics**: Word cloud formation, Sentiment analysis and twitter data mining though R

HR Analytics: Concept and its applications.

**Data Mining and Operations Management**: Decision trees and CART algorithm, ANOVA, Artificial Neural Networks (ANN)

Market Behaviour Predictions: New product exit models, forecasting models, choice models to understand customer purchase behaviour, customer utility models, structural equation modeling to predict causality in marketing, problems, panel data modeling