**International Training Programme**

 **on**

**Data Analytics and Risk Management**

 **(December 5 to December 16, 2022)**

**Introduction**

Governments and organizations across the globe are overloaded with huge repositories of data with important information and knowledge buried in it. They are facing the data explosion problem: drowning in data but starving for knowledge: more data but less understanding. Government officials require understanding or making sense of data. Analytics has become vital for policymakers across departments and ministries and has become a major enabler. The term “analytics” deals with how to obtain, store, analyze, visualize and present data. Improvements in data acquisition technologies and reduction in data storage cost but making sense of collected data and leading to data-driven decisions is the key. The knowledge or insights by data empower policymakers in taking proactive decisions, managing risky projects and effective use of limited resources. This program will equip the participants with the concepts and techniques of data analytics as well as policy applications. The program will also focus on how to use these techniques in practical situations to enhance decision-making.

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**Objectives**

The objectives of the program are to

* To introduce the participants the concepts of data analytics, and its ecosystem for gaining insights for policy and implementation.
* To help participants consider the organization's capability to analyze, and use data for gaining citizens insights.
* To gain an understanding of various techniques for analytics: Descriptive, diagnostic, predictive and visualization techniques for policy planning and implementation risk management
* To get exposure to leading data analytics software such as MS EXCEL, SPSS, ATLAS-TI, and other popular analytics applications
* To appraise the partcipants about technical, financial and environment risk associated with the projects.

**Program Coverage**

This course primarily discusses concepts of data analytics, the technologies required, its public policy applications and approaches towards guiding government decisions using analytics. This course does not cover the micro details of mathematics, algorithms, and programming. This course is designed for policymakers, bureaucrats or executives of any government to make sense of data and to make informed and data-driven decisions.

* Basics of data analytics.
* Basics of various techniques for analytics: Descriptive, diagnostic, predictive and visualization techniques
* Hands-on training on data analysis software in lab sessions: SPSS, and other popular analytics applications
* Application of techniques such as forecasting, prediction, churn modeling, clustering, association rules, decision tree, link discovery etc. in different industry sectors.
* Risk Analysis - Dealing with Uncertainty in Projects
* Challenges in Project Implementation Planning and Implementation

**Target Group**

Executives working in Government departments and industry.

**Venue & Accommodation**

The Programme will be organized at the Indian Institute of Public Administration campus. Participants get full board and air-conditioned accommodation on the Institute campus.

**Faculty:**

* Dr. Roma Mitra (Coordinator), Associate Professor, E-mail: roma.mitra@gmail.com/ +91-9310338939(m)/+91-11-23468350 (landline)
* Dr. Pawan Taneja (Coordinator), Assistant Professor, Email: dr.p.k.taneja@gmail.com/ +919818210463/ +91-11-23468327 (landline)

**Mode of Evaluation**: Assignment and Presentation by the participants.

**Maximum number of seats**: 35

**Minimum Number of Seats**: 20

**Educational Qualification:** Graduation from a reputed university or equivalent with a basic understanding of statistics

**Work Experience**: Minimum 5 experience in service/manufacturing sector is preferred

**Pedagogy:**

* + Bringing laptop is compulsory requirement for the program
	+ An amalgamation of pedagogical tools, viz. Cases, lectures, self-reflection sessions discussions, presentations, audio-visuals, and experiential presentations. A typical day will include about four hours of classroom sessions. The participants are expected to devote sufficient time for group work, preparation for classroom discussions and group presentations.
	+ Hnads on Experience on various software
	+ Exposure Visit to Various Departments/Project sites in Delhi NCR and nearby cities
	+ IIPA has an outstanding learning ecosystem that includes diversity among the program participants, faculty, and senior Indian officials present on the campus. A regular visit of the senior leaders from the Government, policymakers, and officials from the industry make a conducive learning environment for the participants.

**Minimum Age:** 30 years

**Maximum Age:** 55 years