भारतीय प्रौद्योगिकी संस्थान दिल्ली
Indian Institute of Technology Delhi
Department of Management Studies
IIT Delhi

Executive Programme in Data and Decision Sciences Consulting

(6th October 2018 – 9th December 2018, Classes on Weekends/National Holidays)

Background: With the huge amount of data and its complexity involved in today's business processes, there is a need to analyze and visualize this data and make effective decisions in the real business problems involved. Thus there is a need to leverage upon the data and decision sciences techniques to take on business challenges and goals. Data science professionals become experts to extract meaning from large volumes of data, which requires both tools and methods from mathematics, operational research, statistics, computer science, and other related subjects. The objective is to augment managerial decision making from data driven insights. Exploration in the domain is a collaborative approach involving mathematical understanding, business tactics, technological applications and behavioral sciences to help management make data driven decisions. Pedagogy would involve lectures, classroom discussions, group assignments, case studies and hands-on sessions in IIT Delhi.

Note: This is an extensive training programme for working executives under the Continuing Education Programme of IIT Delhi and is not a degree programme.

Objectives:

1. To understand business analytics, information management and data sciences from a techno-functional perspective.
2. Analyzing and solving complex business problems through effective data driven decision making.

Tentative coverage: Types & Levels of Analytics Systems, Descriptive Analytics using MS Excel, Descriptive Statistics using SPSS, Overview to Data Mining, Regression Analysis using SPSS, Multivariate analysis using SPSS, Qualitative Data Analysis, Data Multidimensionality (Data Warehouse, OLAP, OLTP, etc),Development approaches for Analytics Projects, Project Sizing based on Use Cases, Prescriptive Analytics using MCDM / AHP, Machine Learning using Neural Networks, Overview to Big Data & Data Science, Data Models for Big Data Products, Natural Language Processing& Applications, On Site Web Analytics (Google),Social Media Analytics, Data Visualization approaches, Overview on decision making models, Application of decision making models, Quantitative Data Analysis through LP/NLP(Single Objective) using Excel/LINGO, Quantitative Data Analysis through LP / NLP (Multiple Objective) using Excel / LINGO, Heuristics / Meta-Heuristics / Hyper-Heuristics, Predictive Analytics, Prescriptive Analytics using MCDM: ISM, IRP, DEMATEL, TOPSIS, Prescriptive Analytics using Fuzzy-MCDM: Fuzzy-ISM, Fuzzy-IRP, Fuzzy-DEMATEL, Fuzzy-TOPSIS, Prescriptive Analytics using hybrid-MCDM:IRP-AHP, Qualitative Analysis from Most Likely, Pessimistic and Optimistic Approach and its convergence, Aggregation of ranking variations using MILP in Excel/LINGO etc.

Program Coordinators:

- Prof. Arpan Kumar Kar (arpankar@iitd.ac.in), +91-11-2659-7320
- Prof. Surya P Singh (sprsingh@dms.iitd.ac.in), +91-11-2659-6302

Experts for Sessions: Faculty Members of IIT Delhi, IIMs, and domain experts from the government/industry.

For whom: Working professionals, entrepreneurs, academicians, owner-managers, senior / mid-level managers, young graduates.

How to Apply: Please fill the online application form. Please send the hard copy of your online form along with the self-attested copies of educational and work experience certificates: Prof. Arpan Kar, Programme Coordinator, Room 502, Department of Management Studies, Vishwakarma Bhawan, IIT Delhi, Hauz Khas, New Delhi-110016.

Complete the Online Application: https://goo.gl/s3CFM1

Dates:
Call for applications: 15th April, 2018.   Last date for application: 31st August, 2018.
Final list of selection: 7th September, 2018.   Registration deadline: 15th September, 2018.

Selection: All graduates are eligible. However work experience and academic background would be used in the short-listing process. Shortlisted applicants shall be called for on spot registration against payment of fees to **IITD CEP ACCOUNT**.

Fee: Payable to IITD CEP Account: Rs. 1,18,000 (Course fee Rs. 1,00,000/- + GST @ 18%).
There are no installments / financing schemes available.