UC RIVERSIDE UNIVERSITY OF CALIFORNIA & FORE FORE School of Management

CERTIFICATE IN

BIG DATA ANALYTICS

FOR BUSINESS & MANAGEMENT

BATCH-4

EDUCATION LANES
A Mahindra Group Initiative

PROGRAM OBJECTIVES

Applications of Big Data transcend all disciplines. Use of predictive analytics pervades diverse disciplines such as oil and gas, marketing and sales, sports, molecular biology, drug-designing, waste management, finance and the list is indeed very long.

How different Sectors/Industry use Big Data

- Smart cities, are the melting pot where a variety of big data technologies mesh with one another to transform a city into a semi-intelligent being.
- In Marketing and Sales, Big Data is fast emerging as a potent tool to gain deeper insights into Customer behavior and thereby act as a strong driver in spurring innovation.
- In manufacturing, operations managers are employing advanced analytics on historical process/data to identify patterns and relationships among discrete process-steps and inputs, and then optimize the factors that prove to have the greatest effect on yield.

Broadly the course has three parts: Analytics, Hadoop-Eco System, Deep-Learning & AI. At the end of this course, given a large dataset from any domain, a participant will learn to:

1. Clean, transform and visualize a dataset to gain deeper insights and make it ready for analysis
2. Select a subset of appropriate machine learning algorithms that could be applied to get the desired predictive results
3. Gain sufficient proficiency in tools necessary to implement ML algorithms
4. Use of relevant tools and techniques to get a reasonable predictive accuracy
5. Apply the knowledge of Deep Learning & Artificial Intelligence to a wide array of disciplines such as health, process control, navigation & others.
6. Install, Setup, Configure and Experiment with a complete Hadoop and Kafka ecosystem, and be sufficiently familiar with the variety of NoSQL data bases and decide for him/herself which one to use, when and how.

This course is project oriented: All tools, data and platforms including Hadoop-ecosystem and Kafka(Spark)-streaming technologies necessary for learning data-analytics are provided to the participants in advance. There is a heavy emphasis on open-source technologies universally used almost throughout the industry. Each participant, at the beginning of the course, receives Virtual Machines (VMs) fully equipped with all the software platforms, tools, packages and data to work on. We make the whole process very simple and stress-free. Details of Virtual Machines can be seen ***here***.

Complete Program is project based. We have experience with several Industrial projects. Students execute these and other projects while implementing techniques learnt and as part of weekly exercises.

WHO SHOULD ATTEND

EXECUTIVES

Ambitious Executives (from Private/Public sectors) looking forward to sharpening their skills in making sense of data in order to innovate and add more value to their organization and to society.

ACADEMICIANS

Lecturers and Professors for extending the horizon of their knowledge through deepening their research skills.

DATA SCIENTISTS/DEVELOPERS

Techniques taught to them will have applications in a broad array of disciplines.

PEDAGOGY

We strongly believe that a course in data analytics can only be practice-based rather than theory based. The teaching pedagogy will be like this: First, the technique/algorithm is conceptually explained without getting into mathematics and then a project is undertaken to implement the technique. Datasets for implementation are made available in advance and so also a copy of code we need to execute. The code is numbered and copiously commented upon so that long after the lecture has finished, students can go back through the code/comments and refresh their knowledge. During the lecture, we execute this code, line-by-line and explain the steps. At his/her end, the student also execute the same code and may seek clarification. Consequently, results are available at our end as also on Students' Laptop.

COURSE SCHEDULE

COURSE DURATION
6 months approx
(Two Sessions of 3 hours per week on Sat-Sun)

COURSE TIMINGS
Saturday- 10:30 am to 01:30 PM
Sunday- 10:30 am to 01:30 PM

PROGRAM FEES

	Registration Fees	Admission Fees	1st Installment
Installment Date	At the time of Enrolment	27th-Dec'18	25th-Feb'19
Installment Amount	10,000/- + GST	25,000/- + GST	25,000/- + GST

Applicable GST(18%) will be applicable

₹60,000/- + GST (Early Bird Discount of INR 5,000/- (Course fees directly payable to TMGFL)

OTHER FEES

Rs 5500/- + GST: E-resources/Virtual Machine containing learning ecosystems & Software. (Mandatory Fees)
Payable directly to FORE School of Management, New Delhi.

COURSE MODULES

S.No	Subject	Hours
1.	Introductory Business Statistics	15
2.	Data Mining & Data Analytics ■ Machine Learning algorithms (51 Hours) ■ Hadoop and Kafka Eco System; Data stream processing and analysis(26 Hours) ■ NoSQL and Graph Databases(12 Hours) ■ Deep learning, AI & Computer vision (22 Hours)	111
3.	Business Analytics Capstone (Python Oriented)	20
4.	Web Analytics	8
5.	Student Exercises/Projects	---
	Total Learning hours (excluding Exercises)	**154**

Full course content can be seen *here*.

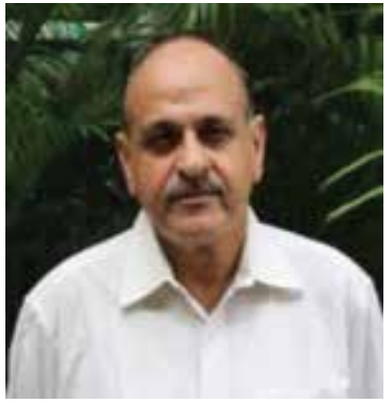
ABOUT FORE SCHOOL OF MANAGEMENT

FORE School of Management, New Delhi (FORE) has been established in 1992, by the Foundation for Organisational Research and Education, a non-profit organisation, with a mission "To achieve and sustain Leadership in Management Education, Research, Consultancy and Development". With a sharp focus on Management Education, Executive Education Programmes/MDPs, Consulting and Research, FORE stands amongst the Top Business Schools in the country.

Eminent academicians with many years of experience & experts from industry, recognized nationally & internationally, constitute faculty at FORE. FORE has in-house training facilitators in the field of Big Data Analytics, Communication, OB & HR, Finance, Operations, Marketing, IT, International Business and Strategic Decision Making.

FORE conducts Executive Education Programmes **(EEPs)** to equip participants with knowledge, skills & attitudes required for effectively responding to global developments & competitive requirements. Our EEPs are designed with an appropriate blend of conceptual & experiential learning.

ABOUT FACULTY



Program Director

Prof. Ashok Kumar Harnal: Graduated from IIT Delhi in Electronics and Communication; M. Phil with Distinction from Punjab University, Chandigarh, and MA (Economics) from Punjabi University. Expert in Big Data, Data Analytics and Deep Learning, both on the technology side as also on Analytics side. Extensively taught faculty and students on the subject of big data technology and analytics. Has been associated with University of California, Riverside, US, in one of the Executive Education programs on Big Data and Data Analytics for last three years. Participated in various machine learning projects with real world data in areas of business, environment, marketing and advertisement. Conceived, planned & implemented in Defence Estates three country-wide information systems: a) Raksha Bhoomi to computerize land records; b) Knowledge Management of land-title related files/maps in all Defence Estates offices; and c) Setting up of a Disaster Management organization, Archival Unit and Resource Center, at Delhi and at Pune for safe storage of land-title related records in paper, digital & microfilm forms. Authored two books: one on Programing Games on Computers and the other on Linux Applications and Administration; both books have been published by Tata McGraw-Hill.

Prof. Kemal Oflus, Professor at UCR: Capstone Project Faculty convering Python module, Ex-rocket scientist. Highly motivated and versatile data scientist with fifteen plus years of proven analytics performance. Skilled at building effective and productive working relationships with customers, team members, executive management. Excellent time management, negotiation, interpersonal and presentation skills. A talent for analyzing problems, developing simplified procedures, and finding innovative solutions those improve operating efficiency and lower costs for customer. Successful in bringing methods long have been used in engineering and scientific communities to business customers and decision makers.

Prof. Sunita Daniel

Faculty Profile

Prof. Rakhi Tripathi

Faculty Profile

Dr. Jitendra K. Das

Faculty Profile

Prof. Hitesh Arora

Faculty Profile

EDUCATION LANES

A Mahindra Group Initiative

ABOUT EDUCATION LANES

Education Lanes – A Mahindra Group Initiative that offers certificate programs from premier institutes on a virtual platform. Education Lanes offers a comprehensive direct-to-device education suite with real-time interactive and participative virtual classroom sessions.

For queries, call us at: 9210030440 | Email: Puneet.sharma2@Techmgfl.com | www.educationlanes.com

* Terms & Condition Apply. Any request for refund of registration fees on account of valid reason prior to the closure of registrations or 10 working days before the date of course commencement whichever is earlier, the amount paid shall be refunded with a deduction of ₹5,000 + applicable taxes. For more info visit www.educationlanes.com