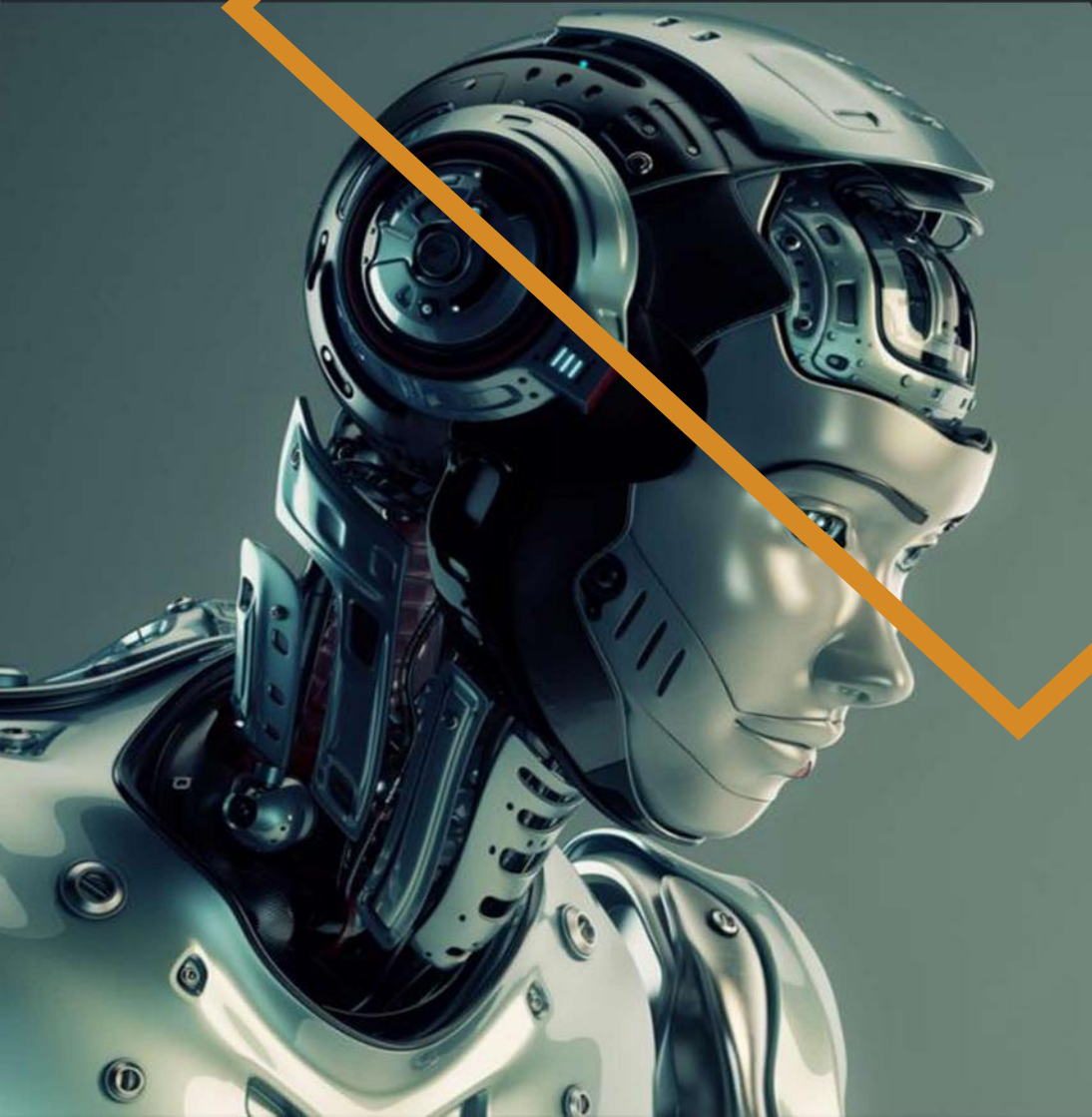


**Tech  
Mahindra**



FORE SCHOOL OF MANAGEMENT



**CERTIFICATE IN  
MACHINE LEARNING  
& DEEP LEARNING**

**EDUCATION LANES**

A Mahindra Group Initiative



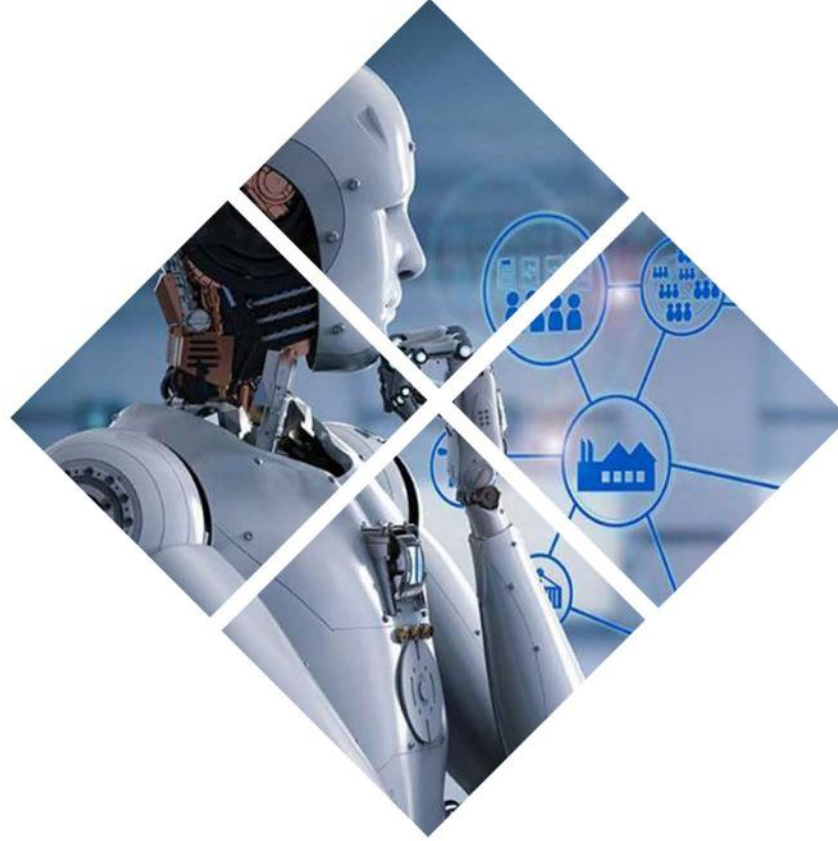
## ABOUT US

Education Lanes is Tech Mahindra's Growth Factories division's initiative that offers certificate Programmes 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.

## ABOUT FORE

FORE School of Management best known as FORE, is a premier management institute located in New Delhi, India. FORE stands for 'Foundation for Organizational Research and Education'. Established in 1981, the school is located in heart of South Delhi. It offers Post Graduate education. In addition to its main academic programmes, FORE is also engaged in Research, Consultancy, seminars, academic conferences and research publications.

# COURSE OBJECTIVES



Machine Learning (ML) and Deep Learning have been subject of study since the inception of neural networks. With an advancement in technology, especially, Graphical Processing Units (GPUs), the demand for knowledgeable and skilled personnel in this area have received a fillip. Applications of ML & deep learning range from Computer Vision to Speech recognition & translation to marketing and to drug discovery. It is one of the fastest growing fields of Artificial Intelligence. The objectives of the present program are:

1. To work on important technologies of ML & AI: Deep learning, Natural Language Processing and Reinforcement Learning
2. Developing skills in predictive analytics using ML and Deep learning algorithms.
3. Practical implementation of every technique with real world applications

# PEDAGOGY



We are keenly aware that our participants come from varied backgrounds both college wise and basic-education-wise. We strongly believe that a course in data analytics can only be practice-based rather than theory based. We also believe that a practice based course requires constant interaction with the teacher during lecture hours in real time. As it is an online course, the teaching pedagogy is like this: First the theory part is conceptually explained without getting into mathematics and then a project is undertaken to implement the techniques. Datasets for implementation are made available in advance and so also a copy of code (or hints on it) that we need to execute. The code is numbered and copiously commented 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 (or prompt students to fill in the gaps), line-by-line and explain the steps. At his end, the student executes the required code on his laptop. Consequently, rests are available at our end as also with the Students immediately. In short, both the teacher and students are working on their respective laptops simultaneously; students solve their problems and ask any questions to clarify. The whole experience is just as if everyone is sitting in a laboratory and working together. Our e-learning platform has a wealth of material and articles reflecting latest developments in this field; it is frequently updated. Students are assured of continued access to e-learning site even after the program has finished.

## WHO SHOULD ATTEND

The course is especially designed for executives from industry, students, faculty, and research scholars who are interested in understanding the concepts and practical applications of Machine Learning, Deep learning and artificial intelligence. A simple programming background would be preferable.

## ELIGIBILITY

Pursuing Engineering Students /Graduates in any discipline/ Working Professionals.

## ASSESSMENTS

It is based on Performance in Exercises & Projects.

CURRICULUM

**MACHINE LEARNING  
& DEEP LEARNING**



# COURSE MODULES

1. Data Exploration	05 Hours
2. Unsupervised Learning	05 Hours
3. Supervised Learning	15 Hours
4. Deep Learning (including Natural Language Processing)	40 Hours
5. Reinforcement Learning	06 Hours

# COURSE SCHEDULE

- ◆ Saturday/ Sunday : 2PM to 5PM from 30th March to April End  
3PM to 5PM May till the end of the course
- ◆ Total lecture hours (excluding exercises) are 71 hours.

## CLASS TIMINGS

Saturday/ Sunday : 2PM to 5PM from 30th March to April End  
3PM to 5PM May till the end of the course

## OUR FACULTY



Prof. Ashok Kumar  
Harnal

B.Tech, IIT Delhi; M.Phil (Social Sciences), Punjab University, Chandigarh; MA (Economics); Diploma in Project Management, Punjabi University, Patiala. Expert in implementing Hadoop works and Cloudera based multi layered big-data systems. Extensively taught faculty and students on the subject of big data technology and analytics. Participated in various machine learning competitions 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.
- c. Setting up of a Disaster Management organization, Archival Unit and Resource Center, at Delhi for safe storage of land-title related records in paper, digital & microfilm forms.

Total Years of Experience : 31 Years





Prof. Lalit K Jiwani

Prof Lalit K Jiwani: PhD, IIT Delhi (Signal Processing) and M.Tech. (Integrated Electronics and Circuits) from Department of Electrical Engineering, IIT Delhi. Experienced academician and researcher having worked both with leading academic institution and technology industry. His primary thrust is in the creation and application of Information Technology for Business and Management. He has teaching and research interest in the area of Digital Signal Processing, Statistics and Random Processes, Machine Learning and Pattern Recognition and Deep Learning, NLP, Image and Video Processing. He is specially interested in the role of technology in business and value creation. He has presented his work in leading conferences of IEEE and European Signal Processing Society in USA, Canada, Denmark, Singapore and India. He was the Session Chair for 2016 IEEE Region 10 Conference (TENCON 2016) Singapore. He is a member of IEEE and IEEE Signal Processing Society.

Total Years of Experience : 13 Years and 10 months

## PROGRAMME FEES

	Course Fee (+GST)	One Time Fee (+GST)
Amount	40000 Rs	35000 Rs

Installment Schedule	Registration Fees (+GST)	Admission Fees (+GST)	1st Installment (+GST)
Installment Amount	10000 Rs	15000 Rs	15000 Rs
Installment Date	At the time of Registration	Mar'19	Jun'19

## OTHER FEES

E-resources/Virtual Machines  
containing learning ecosystems  
& Software  
(Mandatory Fees) - 5000 Rs + 18% GST

**NOTE :** The Virtual Machine fee is to be paid directly to FORE

# EDUCATION LANES

A Mahindra Group Initiative

For Admissions,

Call us at 9975806184

Email us at [info@educationlanes.com](mailto:info@educationlanes.com)

[www.educationlanes.com](http://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](http://www.educationlanes.com)

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