

THE FUTURE
IS HERE



Certificate course on
**ARTIFICIAL INTELLIGENCE
& MACHINE LEARNING**



Institute of
Management Technology
Centre for Distance Learning, Ghaziabad



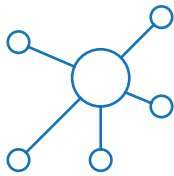
Institute of
Management Technology
Hyderabad

...Harnessing Knowledge for Businesses



WHAT IS THE COURSE OBJECTIVE?

This certificate course provides foundational skillsets to managers and technology leaders in the new age areas of Artificial Intelligence & Machine Learning (AI & ML)



WHAT IS THE COURSE OUTCOME?

The course enables the learner to:

- Gain globally relevant and industry ready skills in AI & ML
- Apply the knowledge thus gained across wide range of business dimensions.



WHAT CERTIFICATION IS GIVEN?

A Joint certificate by IMT CDL & IMT Hyderabad would be given to successful participants

WHAT DOES THE COURSE COVER?

- Statistics for Data Science
- Statistics using Python
- Introduction to the process of Machine Learning
- Supervised Learning
- Unsupervised Learning
- Introduction to AI & Deep Learning
- Deep Learning Concepts & Applications
- Capstone Project

WHO SHOULD ATTEND?

- Working Executives
- Data Analysts
- Developers
- Fresh Graduates

WHAT IS THE COURSE STRUCTURE?

Online interactive classes will be held once a week by an eminent and expert set of faculty. Participants are required to follow the weekly study plan in the LMS (Learning Management System) followed by a capstone project towards the end of the course and an End-Of-The-Course-Examination.

WEEK 1

Statistics for Data Science -I

3 HOURS

- Scales of Measurement
- Measures of Central Tendency
- Measures of Dispersion
- Correlation; Covariance
- Probability Theory & Bayes' Theorem

WEEK 2

Statistics for Data Science-II

3 HOURS

- Fundamentals of Hypothesis Testing and Decision Making; Null and Alternative Hypotheses, Critical value of the test statistics; Regions of rejection and non-rejections; Hypothesis testing: critical value and p value approaches
- Test for difference between Means
- Chi-Square test
- Analysis of Variance (ANOVA)

WEEK 3

Statistics using Python

3 HOURS

- Introduction to Python language
- Basic statistics using Python

WEEK 4

Introduction to the process of Machine Learning

3 HOURS

- What is Machine Learning?
- Difference between statistics & machine learning
- Supervised & Unsupervised Learning Algorithms
- Applications of Machine Learning

WEEK 4

Introduction to the process of Machine Learning

3 HOURS

- What is Machine Learning?
- Difference between statistics & machine learning
- Supervised & Unsupervised Learning Algorithms
- Applications of Machine Learning

WEEK 5

Supervised Learning-I

3 HOURS

- Multiple Regression(MLR)
- Interpretation of regression co-efficient
- Heteroscedasticity
- Multi-collinearity
- Outlier Detection

WEEK 6

Supervised Learning-II

3 HOURS

- Logistic Regression
- Decision Trees & Random Forest

WEEK 7

Unsupervised Learning

3 HOURS

- K-Means Clustering
- Association Rules

WEEK 8

Introduction to AI & Deep Learning

3 HOURS

- Introduction to Neural Nets & AI?
- The perceptron
- Why Deep Learning?
- AI/Deep Learning Applications

WEEK 9

Deep Learning Concepts & Applications

3 HOURS

- Convolutional Networks ; Recurrent Nets
Auto encoders ; Recursive Neural Tensor Nets;
Deep Learning Applications

WEEK 10

Capstone Project

8 HOURS

- Capstone Project

WHO IS ELIGIBLE?

Graduate in any discipline with minimum 50% marks.

HOW WOULD BE THE GRADING DONE?

Grading would be done basis an End-Of-The-Course-Examination and a Capstone Project with a split of 75% for End-Of-The-Course-Examination and 25% for the Capstone Project.

Pass criterion would be a minimum of 50% for each of the above individual components. Overall pass aggregate also must be a minimum of 50%.

WHAT IS THE PROGRAM SCHEDULE?

DURATION:

Three (3) Calendar Months/ Ten (10) Calendar Weeks

FREQUENCY OF ONLINE CLASSES:

Once in a week [over 10 weekends] for ~ 3 hours

WHAT IS THE COURSE FEE?

Rs. 40,000/- (Including Taxes)

WHO ARE THE FACULTY?



Surajit Ghosh Dastidar, PhD

Surajit Ghosh Dastidar has done his MBM from Dept. of Business Management, Calcutta University and PhD in Network Optimization. He is a SAS Certified Predictive Modeler. He serves as the Chairperson of Analytics Center of Excellence (ACE) at IMT Hyderabad. He has published in journals like Journal of Statistical Software, International Journal of Business Analytics and Intelligence among others. He was a Visiting Scholar at College of Business, University of Toledo and has undergone training in Data Science from London School of Economics and Political Science (LSE). Dr. Dastidar is a seasoned instructor, having taught a wide range of data science courses and tutorials for over a decade.

Sridhar Vaithianathan, PhD

Sridhar Vaithianathan is an Associate Professor and heads the Information Systems & Business Analytics Department at Institute of Management Technology (IMT), Hyderabad, India. He has completed his PhD (Determinants and Impact of E-Commerce Adoption in India) in Management from ICFAI University, Dehradun. He was a visiting scholar at University of Toledo, Ohio, USA (Aug 2007 – June 2008). He also has been a speaker at the renowned INFORMS analytics conference (15-17 April 2018) held at Baltimore, Maryland, USA. A Recipient of “Highly Commendable paper award” in the recently concluded “Business Analytics and Intelligence Conference (11-13 Dec 2017)” at IIM, Bangalore, he has also participated in various data contests hosted by Kaggle, KDnuggets, Analyticsvidhya, Crowdanalytix etc.





Mahesh Ramalingam, PhD

Mahesh Ramalingam is an Assistant Professor in IT & Analytics area at IMT Hyderabad. He teaches Big data Analytics, Analytics using SAS, and Data Analysis for Decision Making. He began his career as Market Research Analyst, where he worked on Big Data Analytics and Predictive Modelling using R and Python. His primary areas of interests are service quality and customer behavioural intention outcomes. His other works include development of metrics to evaluate marketing decisions (e.g. customer segmentation, purchases, returns). He has conducted workshops and FDPs related to scale development process, multivariate data analysis, covariance based structural equation modelling and partial least squares structural equation modelling among others.

For further details:



+91 9717232316



anshu.sharma@imtcdl.ac.in

www.imtcdl.ac.in

A-16, Site-3, UPSIDC Industrial Area,
Meerut Road, Ghaziabad - 201 003, UP, India