

## EDUDELPHI EDUCATION PVT. LTD.

DISSEMANATING KNOWLEDGE

**ANNOUNCES** 

FIRST CERTIFICATE PROGRAMME
(WEBINAR MODE)

IN

MACHINE LEARNING USING PYTHON

From 21st April onwards

UPDATE
YOUR
ANALYTICAL
SKILLS
THROUGH
POPULAR
DATA
ANALYTIC
TECHNIQUES



# **BACKGROUND**

Efficiency in Data Analytics is becoming a clear difference between top performers and others-across industries. With the exponential growth in all types of global interactions, big data is impacting various aspects of life, especially business and social interactions. The impact of those interactions is becoming so significant that it is essential to capture all data that streams into social, business, and political life. Such raw data need to be identified, captured and the information value contained in them need to be obtained in real-time. Data Analytics is a technique developed to obtain the valuable information contained in the data. Business decision-makers, policymakers, researchers, etc., all will be equipped, through data analytics, with a formidable tool to obtain valuable information for the decisions to be made. As the need for data analytics is exponentially growing across the globe, many companies and organizations would be requiring people with data analytics skills.

Edudelphi is proud to launch the -100 hours- certificate program on data analytics to enable all those interested to acquire this modern technique of extracting valuable information from the stream of data concerned with the area of their interest or vocation. It is an intensive three-months, with three hours in three days of webinar sessions per week, interactive program that will enable the participants to make effective and correct decisions. Professional trainers in data analytics will give a complete insight into Data Analytics and also provide hands-on support to make the participants confident to use them wherever they like.



# Our Faculty

#### **MUNMUN GHOSAL**

Ms. Munmun Ghosal is working as a Data Scientist and trainer. She has a total of 9 years of work experience in academics and industry with research areas in Data Analytics, Machine Learning, VLSI, and Signal processing. She is passionate about learning and sharing knowledge, innovation, programming, writing technical blogs. She delivers corporate and onsite training at various industries and Management/Engineering Colleges. She has worked on various projects on Data Analytics, Machine learning and AI, IoT, VLSI, and Signal processing. Her skill set includes R, Python, Tableau, Power BI, VHDL, VERILOG, C Language, C++, Excel, MATLAB, Virtuoso ADE of CADENCE (45 nm), Xilinx ISE, Aldec's Active HDL, and Microwind. She has presented and published research papers in several reputed national /international journals and conferences. She has completed her M. Tech (VLSI) and B.E. (Electronics Engineering).

### Rupinder Monga, FRM.

B. Tech in Mechanical Engineering from Indian Institute Technology (IIT), Delhi. Master in Financial Management from Rotterdam School of Management, Erasmus University. He also a Charterholder of Financial Risk Manager (FRM) from the Global Risk Association of Risk Professional (GARP).

He has varied experience in the following areas:-

- 13 years of global experience working in capital markets with companies in the Middle-East, Europe, Asia, Africa.
- Proven track record of data analytics, analysis, enrichment, and research to drive business solutions.
- Proficient knowledge in statistics mathematics and analytics thus helping in making informed decisions.
- Significant experience in risk trading, pricing of derivatives and financial products, and capital calculations.
- Experience as Project Manager and Business analyst in Data Management, Analytics.
- Hands-on experience in SQL. python advanced excel to manipulate, transform data as per the requirement.
- Consulting. Management, Training, and Leadership experience in managing clients and teams across markets.

Technical: Excel VBA, Python, SQL, R Power BI.

Functional: Linear and Logistic Regression, Time Series Analysis, Classification, Random

Forest, Credit Scorecard. Market Risk Value at Risk (VAR), Stress Testing.





# CERTIFICATION COURSE ON DATA ANALYTICS-100 HOURS ON MACHINE LEARNING USING PYTHON

	ON MACHINE LEARNING USING PYTHON			
SR.NO.	NAME OF TOPIC	DESCRIPTION	NO.OF HOURS	
1	Introduction to Data Analytics and Data Science	Introduction to data and its types, Introduction of Analytics and its types, Data Analytics, Evolution of Data Analytics, Overview of exploratory data analysis, various technology supports/tools, How to get demo data, AI and machine learning, Overview of some machine learning algorithms with some examples.	3	
2	Basic python for Data Science	<ol> <li>Introduction to python</li> <li>Installation</li> <li>Basic Data Types</li> <li>Numeric, Boolean, strings</li> <li>Lists</li> <li>tuples,</li> <li>Sets</li> <li>dictionaries,</li> <li>Variables</li> <li>Operators</li> <li>Flow of Control - If, If- else, Nested if-else</li> <li>Looping- For, While; Nested loops,</li> <li>Loop Control Statements- Break, Continue and pass,</li> <li>Functions</li> <li>Classes and Objects in brief.</li> <li>Files</li> </ol>	16*2=32	
3	Descriptive Statistics	The measure of Central Tendency: Mean (Arithmetic) & Merits- Demerits, Median, Mode, Standard deviation, Variance, Skewness, Kurtosis Probability Distribution: Normal Distribution, Standard Normal Distribution, Standardization of data	3	
4	Inferential Statistics	<ol> <li>Hypothesis Testing: Null Hypothesis, Alternate hypothesis, Level of significance, P-Value, Decision criteria</li> <li>Z-Test</li> <li>t-test</li> <li>Chi-square test</li> <li>ANNOVA</li> </ol>	5*2=10	
5	Numpy fundamentals	Introduction to NumPy	3	
6	Data manipulation and summarization using pandas	1. Introduction to pandas 2. pandas series 3. data frames	3 3	
7	Other basic python packages used in Data Science	Matplotlib Seaborn Sklearn etc.	3 3 3	
8	Linear & Multi-Linear Regression	What is Regression? Covariance & Correlation, Coefficient of determination (R2) and Adjusted R2, Multiple Linear Regression, Typical Applications of Regression Analysis, Assumptions, case study	6	
9	Logistic Regression	What is logistic regression? , Applications of logistic regression analysis, Prerequisite / when & why binary logistic regression. Case Study	6	
10	Unsupervised Learning:Clustering	What is clustering? When to use cluster analysis? Application of cluster analysis, Types of cluster analysis, K means (In detail), Case Study	4	
11	Decision Tree	What is decision tree? Why decision tree? Types of decision tree Constructing decision tree	6	
12	Ensemble Techniques	1. Bagging: Random Forest 2. Boosting:XG boost,Gradient Boost,Ada Boost(overview)	3 3	
13	Time Series Modelling	What is Time series, Components of Time Series, acf, pacf, AR, MA, ARMA Model, ARIMA Model, Industry Applications.	6	
		TOTAL DURATION=	100 HOURS	

### LEARNING OUTCOMES

The Professional Certificate Programme in MACHINE LEARNING THROUGH PYTHON will provide you with real-life exposure to the most challenging business situations. These 100-HOURS will provide you with ample opportunities to introspect and reflect upon your strategies and thinking patterns.

Show sufficient knowledge to conduct data analysis scientifically, and make insightful and powerful connections between quantitative data analysis and real-world problems.

Demonstrate a sophisticated understanding of the concepts and methods involved in the field of big-data, know the exact scope and possible limitations of each method, and show the capability of using data analytics skills to provide constructive guidance in decision making.

Show proficiency in using the best machine learning platforms available in the market.

Hands-on Learning WITH REAL-WORLD CASE STUDIES.

#### PROGRAMME CERTIFICATE

A minimum of 75% attendance is a prerequisite for the successful completion of this programme. Participants, who comply the same and satisfy the evaluation criteria, will be awarded a Certificate of Completion. Participants who are unable to clear the evaluation criteria but have the requisite attendance will be awarded a Participation Certificate.

**Evaluation:** There will be periodic evaluations built-in throughout the course. These may be in the form of a quiz, assignment, project, case studies, or other objectives/subjective assessments. Details to be announced by the Faculty.



#### PROGRAMME DETAILS

**DURATION: 100 HOURS** 

STARTING DATE: 21st April onwards.

PROGRAMME DETAILS: WEDNESDAY - FRIDAY 2:00 PM - 5:00 PM

### **PROGRAMME FEES:**

RS.25000 +GST-PER PARTICIPANT

### PROGRAMME FEES SCHEDULE:

INSTALMENT	AMOUNT-INR	DUE DATE
FIRST	5000	ON REGISTRATION
SECOND	15000	FIRST WEEK OF WEBINAR
THIRD AND FINAL	5000	END OF THE COURSE

For Further Details and Registration Please Contact

Avijit Goswami
Co-Founder & Director
EDUDELPHI EDUCATION PVT. LTD

WHATSAPP NUMBER: +91 9932 120 098, +971 50 283 4025

Phone Number: +91 94775 53389.

**EMAIL ADDRESS: corporate@edudelphi.com** 

#### **ABOUT EDUDELPHI**

The unique advantage about studying with us is the high quality of trainers who are "Experienced Professionals" from the industry. They bring to the classroom a rare balance between theory & practice to make learning 'Experiential'. They are experts in the subjects they teach and understand the requirements of an international exam so that they are able to help you get the best results.

We bring you the knowledge, advice, and resources of a "Board of Mentors" who are industry experts. With their alternate perspectives and insights, they will help introduce you to a world of new possibilities and opportunities.

