



भारतीय प्रबंध संस्थान रोहतक
Indian Institute of Management Rohtak

ASSOCIATION
OF
AMBA^S



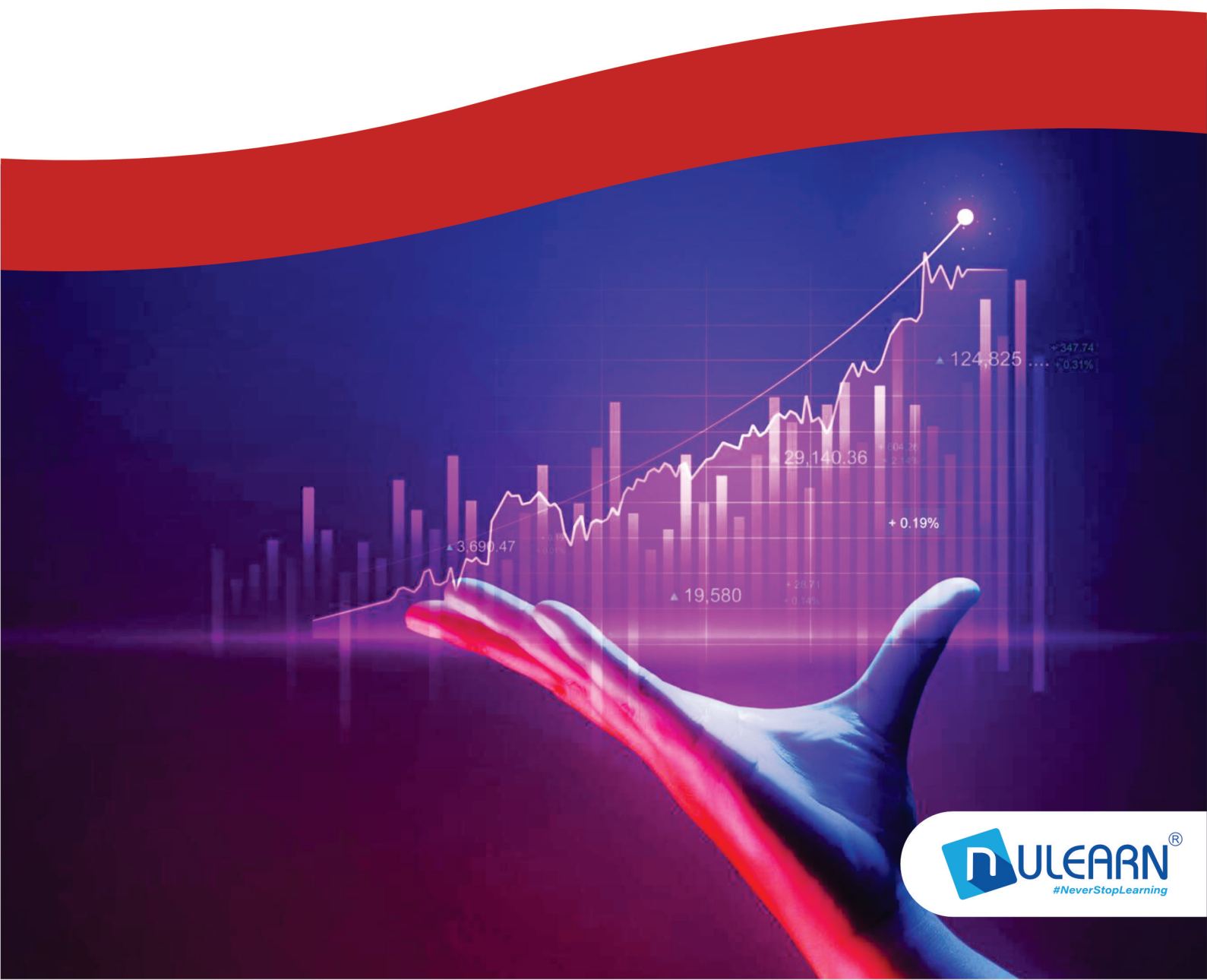
Executive Certification Programme in **Data Analytics**

Batch 16th

• 5 Months

• Weekend Classes

• Pay in Easy EMIs



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The Need for Data Analytics Skills in India

The demand for data analytics skills in India is propelled by the exponential growth in the country's internet user base. With a projected increase of over 900 million internet users by 2025, the data analytics sector is experiencing a surge in opportunities. In 2021 alone, the market for data analytics witnessed a remarkable 26.5% year-over-year growth, reaching a substantial US\$ 45.4 billion.

- 1. Growing Internet User Base:** The rapid growth in internet users has led to an expanded scope for data gathering, enabling businesses to tap into diverse markets. This expansion supports the flourishing data analytics sector.
- 2. Business Challenges and Evolving Technology:** Companies are compelled to find solutions that offer better returns and lower operating costs due to evolving technology and emerging business challenges. To align with market demands, businesses accumulate vast amounts of data across research, marketing, transactions, development, and customer care, necessitating standardized data storage and security solutions.
- 3. Scope for Data Analytics in India:** The outsourcing trend to India has significantly increased over the past three decades, creating a demand for skilled professionals in analytics, probability, big data, administration, and IT. The abundant access to bright and skilled resources in India augurs well for the future scope of data analytics.

Why is Data Analytics Important?

Data analytics is a methodological approach that employs technologies to clean, analyze, and model data, extracting valuable insights for informed decision-making in business. Professionals in data analysis play a crucial role in tech-driven and fast-paced organizations, with startups and IT giants in India actively hiring individuals who can gather, examine, and decipher data.



11 million

Data Analyst and Data Scientist
Job opening to reach 11 million by 2026



9.4 %

In June 2021, India contributed to
about 9.4 % of total analytics job
openings in the world



9 LPA

According to Glassdoor, the average pay
scale of a data scientist is Rs. 900,000
per annum.

Course Objectives

The increasingly volatile, uncertain, complex and ambiguous business environments demand businesses to make effective decisions. Despite being able to generate and store large volumes of data, businesses often find it difficult to glean important insights from it. However, a new genre of approaches, referred to as data analytics, has evolved as a potent approach to process and manage large volumes of data, and deliver business value and corporate results quickly. It is believed that managers skilled in data analytics will be able to steer the next wave of management innovation, productivity, and growth. This course envisages to equip managers with basic, as well as, advanced data analytics techniques for handling and analyzing business data to enable informed and fact based managerial decision-making.

Who should apply?

- Professionals who are looking to upgrade their career in Data Analytics.
- Entrepreneurs/Managers, Leaders, Coordinators and Team Members.
- Working professionals with an acumen and interest in Data Analytics.

ELIGIBILITY

- Graduation or equivalent degree from any recognized University or Institute.
- Corporate Nominated (graduation criteria may be considered for exemption in cases where participants have some prior experience in similar domain).
- Working Professionals with a minimum of 2 years of experience.
- On case-to-case basis, working professionals with less experience can be considered.

About the Course

The rapid developments in information and computer technologies have enabled the generation, storage and processing of data analytics that was out of reach a few years back. Data analytics as is believed to be the key to the next wave of management innovation, productivity, and growth. However, there is a shortage of professionals who can glean meaningful insights from data to make effective decisions. It has been a challenge for most businesses these days to figure out how to get the most reliable business tools to use.

This course mostly envisages to provide an introduction & advanced data analysis using the omnipresent spreadsheet application Microsoft Excel (depth majority coverage), and also one of the most popular and powerful open source statistical and data analytics tool 'R' for handling and analyzing business analytics data to enable informed and fact based managerial decision making.

TOP TRENDS IN DATA ANALYTICS

- AI and machine learning are the factors that determine the way we interact with our analytics and data management.
- Prescriptive analytics examines data or content that determines what decisions should be made and which steps are to be taken in order to achieve an anticipated goal.
- The multi-cloud strategy helps in reducing the risk and provides more flexibility.
- Artificial Neural Network is a model that is specifically utilized for time series analysis, which is applicable to data from the past, helps in modeling the existing data and makes predictions about the future.

COURSE PEDAGOGY

The form of delivery will be Blended (Campus, Self paced and Online), with 2 days workshop at the end of the course for project submission. All other sessions will be through digital platform & delivered LIVE by the eminent faculty of IIM-Rohtak. Students will have access to Self Service Learning through which they may access webinars, past projects, assessments, notes, alumni testimonials etc.

- NOTE :-**
- * A minimum of 30 count is mandate for Campus Immersion to take place at IIM Rohtak Campus.
 - * Campus Visit charges will be over & above the course fee.

ASSESSMENT CRITERIA

Periodic evaluations have been built in throughout the duration of the course in the form of quizzes, assignments, projects, case studies and other objective/subjective assessments. The evaluations are designed to ensure continuous student engagement and to encourage learning. Students who successfully clear the same along with the requisite attendance criteria will be awarded a Certificate from IIM Rohtak.

Program Highlights



Certification From IIM Rohtak

Opportunity to earn a certificate of completion in Data Analytics from Indian Institute of Management Rohtak.



Weekend Online & Interactive Classes

Classes are held on the weekends so that learning and work can be managed together and it's easy for working professionals to attend lectures.



India's Top Faculty Panel and Industry Experts

Learn from top IIM faculty panel & industry experts - Classes by highly qualified professors in the field of Data Analytics.



Insights into Data Analytics

97.2% of organizations are investing in big data and AI. Be the face of change and learn Data Analytics from renowned faculty panel.



Case-Based Sessions

Real life, case-based course structure to enhance implementation of theoretical concepts to real life problems.



Campus Visit

IIM Rohtak campus visit at the end of course enables students to interact with their faculty panel and peers.



End Term Project

Project work is an imperative part of the program as it ensures practical knowledge of all tools and techniques.

Program Outline

Understanding Analytics and its Role in the Organizations

- Course Brief
- Introduction and Background of Data Analytics
- Knowledge Discovery Process
- Project Details
- Introduction to case methodology

Sensitivity Analysis, Enhancing Decision Process

- Scenario Manager for Decision Makers
- Data Table (one way and two way)
- Goal Seek and its applications

Business Focused Data Analytics through Excel

- Data Validation
- Data Referencing, Indexing and Charting
- Optimization

Data warehouse, OLAP and Pivot Table

- Extraction, Transformation and Loading Process, Architecture
- OLAP Operations and Simulation

Enterprise Reporting

- Visual Analytics
- Building Dashboards

Random Number Theory and Price Analytics

- Monte Carlo Simulation
- Price Analytics

R-Programming - I

- Introduction to R (part 1)

R-Programming - II

- Introduction to R (part 2)

Program Outline

Analytical Techniques for Business Intelligence – I

- Classification: Supervised Learning

Analytical Techniques for Business Intelligence – II

- Association Rule Mining (unsupervised learning)

Analytical Techniques for Business Intelligence – III

- Clustering (unsupervised learning)

Analytical Techniques for Business Intelligence- IV

- Neural Networks (supervised learning)

Analytical Techniques for Business Intelligence – V

- Content based Recommendations
- Collaborative Recommendations and Applications (unsupervised learning)

Analytical Techniques for Business Intelligence – VI

- Web and Social Media Analytics

Analytical Techniques for Business Intelligence – VII

- Genetic Algorithm and Fuzzy Logic

Big Data Analytics (introduction)

- Big Data
- Hadoop
- HDFS
- MapReduce

Python

- Introduction to Python

Program Outline

Analytics of Applications

- Web Scrapping and Mining

Analytical Techniques for Business Intelligence – VIII

- Text Analytics
- Sentiment Analytics

Project Presentations

- Project Presentations

Power BI Masterclass By Nulearn

Power BI Desktop Installation

- Data Sources & Visual Types
- Canvas, Visualizations and Fields

Power BI Visualizations

- Bar Charts
- Pie Charts
- Doughnut Charts
- Line Charts
- Area Charts
- Column Charts
- Cards
- Combo Charts
- Decomposition Tree
- Funnel Charts
- KPIs
- Gauge Charts
- Waterfall Charts
- Maps
- Matrix

Slicer Visual

- Single & Multi Select, CTRL Options
- Slicer Number, Text and Date Data
- Slicer List and Slicer Dropdowns

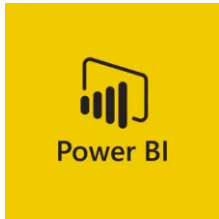
Filters

- Visual Filter, Page Filter, Report Filter
- Advanced and TOP N Filters

DAX

- Define DAX formulas and its applications
- Create basic calculated columns and measures
- Apply common DAX expressions such as FILTER, SUM

Tools Used



PowerBI is an extremely beneficial tool for project managers as it allows them to create dynamic dashboards in order to track important project related metrics like progress, timelines, milestones, budgets and resource allocation. These metrics are not only important to a project manager but can help their team members get a deeper understanding of their tasks in real time.



Python is highly valued in the industry as a prominent programming language. It is the easiest to learn for those venturing into the field of data science and programming because of its versatility. The widespread adoption of Python makes it a crucial tool, and mastering it within a broader data analytics skill set enhances one's proficiency. This in turn, makes them a stronger candidate in the dynamic field of data analysis.



Microsoft Excel is an extremely useful spreadsheet software widely used for organizing, analyzing, and presenting data/data sets. With its user-friendly interface and industry leading features, Excel facilitates efficient data management for both personal and professional purposes so that users can make informed decisions while enhancing their productivity.



R is a programming language widely used across industries, including finance, academia, retail, healthcare & manufacturing. Its importance in data science and analytics stems from its strong analytical capabilities. This makes it a preferred language for statistical analysis, visualization, and modeling.

Eminent Faculty Panel



Dr. Praveen Ranjan Srivastava
PhD (BITS Pilani)



Dr. Harshit Kumar Singh
PhD (IIM Ahmedabad)



Dr. Abhishek Verma
PhD (IIT Kharagpur)



Dr. Ankit Kesharwani
PhD (IBS Hyderabad)



Dr. Mahamaya Mohanty
PhD (IIT Delhi)



Dr. Peeyush Pandey
FPM (IIM Indore)



Dr. Pramod Mane
PhD (IIT Indore)

Sample Certificates



NOTE :- This is a sample certificate. Subject to change.

70% attendance mandatory to receive the certification.

The certificate shall not be issued in case of attendance less than 70%.



NOTE :- Minimum 60% attendance is required in Power BI Masterclasses to get certificate.

Program Fee

For Indian Residents ~~INR 90,000~~ + GST* (18%)
INR 70,000 + GST* (18%) (Limited Time Offer)

For International Students \$1,400

***Application Fee of 2000/- INR to be paid at the time of registration.**

Installment Schedule (Interest Free EMIs):

| | | |
|-----|---------------------------|--|
| 1st | INR 20,000 + GST* / \$450 | Immediate payment upon registration |
| 2nd | INR 25,000 + GST* / \$500 | Payment Deadline - 20th February, 2024 |
| 3rd | INR 25,000 + GST* / \$450 | Payment Deadline - 20th April, 2024 |

*** Power BI Masterclass worth Rs 20,000/- complimentary for participants (Limited Time Offer).**

Loan option available in 6, 9 & 12 EMIs from loan partners.
1% + GST* processing fees will be charged by loan partner in 6/9/12 months EMI.



COURSE DELIVERY

Duration: 5 months (blended mode)
Delivery mode: Nulearn Plug n Learn
Frequency: Once in a week



COURSE SCHEDULE

Timings: Every Sunday & 2nd Saturday
08:45 AM - 11:35 AM (including 20 mins break)

Course Commencement Date: 9th June, 2024



PAYMENT MODE

Online payment or DD in favor of "Human Racers Advisory Private Limited" payable at "New Delhi".



HOW TO APPLY

To apply, working professionals can register at <https://www.nulearn.in> or call at 76696 29222 (Toll Free).



About IIM Rohtak

Indian Institute of Management Rohtak was established by the Ministry of HRD, Government of India by IIM Act 2017. IIM Rohtak is an institute of national importance as per the Ministry of HRD, Government of India.

Established in 2009, Indian Institute of Management Rohtak is a benchmark for top management education in India with a vision to become a global leader in due course. The institute has an enlightened and progressive leadership, acclaimed faculty members, extensive infrastructure and robust teaching pedagogy in place. It continues to impart knowledge in the management domain with a unique cross-functional perspective to prepare future leaders who can manage and create powerful organizations. To realize the vision of the Institute, IIM Rohtak is providing world-class education in management not only through full-time and regular programs but also through various long duration and short duration programs.

IIM Rohtak has been ranked amongst the top five IIMs in research. The institute offers a dynamic environment for high-quality research in all functional areas of management that will benefit various segments of business and society.

About Nulearn

Nulearn is one of India's leading Ed-Tech organizations providing courses in collaboration with IIMs and top B-Schools. Set up in 2017, we have made it our goal to cover all major domains and industries when it comes to our courses. With a commitment to excellence, integrity & consistency, we ensure that you get a learning experience that's superior to the alternatives available in the market.

For years, we have helped working professionals upskill with high quality executive programs, diplomas and MBAs so that they can elevate their career prospects without feeling out of place in this rapidly evolving business landscape. With our industry leading Learning Management System (LMS), we ensure that you get a seamless learning experience that's not just beneficial but essential in order to stay relevant. **We are currently providing courses in collaboration with the following IIMs and B-Schools -**



*In 2023, **Business Today** Magazine ranked **NULEARN** as one of the top EdTech Organisations in India which provide Management Courses in collaboration with IIMs and B-Schools.*

*Source : Business Today Magazine
9th July edition





Admission & Technology Partner

Nulearn

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