

A hand is pointing at a tablet screen. The screen displays a complex financial chart with a grid. The chart includes a candlestick pattern with blue and red bars, a line graph with a green trend line, and a bar chart at the bottom. Numerical values like '1.250.66' and '1.250,68' are visible on the left side of the chart. The background is a dark blue gradient.

Data Analyst Job-Ready Program

Content



Data Analytics as Career Path



Program Highlights



Tools and Technologies Covered



Course Modules



Course Projects



Team Introduction

Why Data Analytics as Career path



DATA GENERATION IS
UNPRECEDENTED



MOST OF THE
BUSINESS DECISIONS
ARE DRIVEN FROM
DATA



SECTOR-WIDE
IMPACT OF
ANALYTICS



HIGH DEMAND FOR
SKILLED
PROFESSIONALS

Surging Demand for Data Analytics



25% for Market Growth
from 2023 to 2030



90% of the companies
use data analytics



50% increase in the job
postings



Over **2,50,000** job
requirements in India



6L+ average salary for
trained freshers

Program Highlights

Key Takeaways

- **25 Weeks** of training program
- **120+ hours** of on-demand video lectures
- **Live** interaction with trainers
- **50+** Assignments and Case Studies
- **4+** Real-world Projects
- **GenAI** applications across tools
- 1-1 Mentorship

Tools and Technologies Covered



Program Modules

Modules	Duration
Module 1: Excel for Data Analysis	2 Weeks
Module 2: Python for Data Analytics	4 Weeks
Module 3: SQL for Data Analytics	4 Weeks
Module 4: Data Visualization with Power BI	5 Weeks
Module 5: Statistics & Probability	2 Weeks
Module 6: Machine Learning and AI	4 Weeks
Module 7: Capstone Project & Case Studies	4 Weeks
Module 8: Resume Building and Interview Readiness	At your pace
Total Duration	25 Weeks

Module 1: Excel for Data Analysis

Focuses on Excel as a foundational tool for performing basic to intermediate-level data analysis.

Relevance: Widely used in business environments for quick analysis and reporting.

Topics:

- Data Cleaning and Formatting
- Excel Formulas & Functions (IF, VLOOKUP, INDEX-MATCH, etc.)
- Pivot Tables and Charts
- Conditional Formatting
- Data Validation
- Creating Dashboards

Module 2: Python for Data Analytics

Introduction to Python programming and essential data analysis libraries.

Relevance: Enables scalable, automated data handling and analysis for larger or more complex datasets.

Topics:

- Python Basics (Data Types, Loops, Functions)
- NumPy for Numerical Operations
- Pandas for Data Wrangling
- Matplotlib & Seaborn for Visualization
- Working with CSV, Excel, and JSON Files
- Introduction to Jupyter Notebooks

Module 3: SQL for Data Analytics

Teaches how to extract and manipulate structured data using SQL.

Relevance: SQL is essential for working with most relational databases in the analytics field.

Topics:

- Introduction to SQL and Relational Databases
- Understanding DDL (Data Definition Language) in SQL
- Working with DML (Data Manipulation Language) in SQL
- Exploring DCL and TCL in SQL
- Mastering Joins and Sub-queries
- Using Functions and Expressions for Data Transformation
- Implementing Constraints, Indexes, and Views
- Creating and Managing Stored Procedures and Triggers
- Leveraging Common Table Expressions (CTEs) and Window Functions
- Optimizing Queries and Handling JSON Data in SQL

Module 4: Data Visualization with Power BI

Teaches how to clean, transform and visualize data to communicate insights effectively.

Relevance: Transforms complex data into easily understandable visuals for better business decisions.

Topics:

- Introduction to Power BI and Its Ecosystem
- Data Transformation with Power Query (M Language)
- Data Modeling and Relationships
- Interactive Visualizations and Custom Charts
- Adding Interactivity: Slicers, Drill through, Tooltips, Bookmarks
- Power BI Service: Publishing and Sharing Reports
- Implementing Row-Level Security (RLS)
- Working with Dataflow in Power BI Service
- Deployment Pipelines and Best Practices

Module 5: Statistics & Probability

Covers foundational statistical methods used in analyzing and interpreting data.

Relevance: Helps analysts draw accurate conclusions and validate business hypotheses.

Topics:

- Descriptive Statistics (Mean, Median, Mode, Variance)
- Probability Basics & Distributions
- Sampling Techniques
- Hypothesis Testing (t-tests, Chi-Square)
- Confidence Intervals
- Correlation & Regression Analysis

Module 6: Machine Learning and AI

Introduces AI and machine learning models for making data-driven predictions.

Relevance: Equips learners with foundational skills to move beyond analysis into prediction and automation.

Topics:

- Introduction to AI, ML and GenAI
- Supervised vs Unsupervised Learning:
- Algorithms: Linear & Logistic Regression, Decision Trees, Clustering (K-Means)
- Model Evaluation (Accuracy, Precision, Recall, F1 Score)
- Introduction to Neural Networks
- Gen AI and Language Models
- Hands on with GenAI APIs: OpenAI / Hugging Face APIs
- Transformers and Attention Mechanism

Module 7: Capstone Project

A hands-on, end-to-end project that integrates all learned concepts.

Relevance: Builds a portfolio-ready project and applies learning to solve real-world problems.

Topics:

- Define a Business Problem
- Data Collection & Cleaning
- Exploratory Data Analysis
- Visualization & Insights
- Reporting and Presentation

Module 8: Resume Building and Interview Readiness

Prepares learners to effectively present their skills, projects, and experience for data analytics roles through a strong resume and confident interview performance.

Relevance: Translates technical learning into career opportunities by improving job search effectiveness and interview success.

Topics:

- Structuring a Data Analytics Resume
- Highlighting Technical Skills and Tools
- Showcasing Projects (Capstone and Personal Projects)
- Creating a Portfolio (GitHub, Power BI Gallery, LinkedIn)
- Preparing for Technical Interviews (SQL, Excel, Case Studies)
- Mock Interviews and Feedback Sessions
- Job Search Strategies and Networking Tips

Course Projects

01

Retail Sales
Performance
Dashboard

- Excel or Power BI

02

Customer
Segmentation for
Banking Domain

- SQL and Python

03

Employee Attrition
Analysis

- SQL and Power BI

04

Inventory Management
and Analysis
Ecommerce Business

- SQL + Power BI

05

Fraud Detection in
Insurance Claims

- Python

Project: Retail Sales Performance Dashboard

Description:

Analyze and visualize sales data from multiple regions and product lines using Excel or Power BI. Build interactive dashboards that allow slicing and dicing of data by region, product, and sales team.

Skills Covered:

- Pivot Tables & Charts
- Dashboards
- Data Cleaning
- Visualization
- Business Reporting

Project: Customer Segmentation

Description:

Use clustering techniques (like K-Means) to segment customers based on their behavior (e.g., purchase frequency, amount spent, location). This helps in targeting marketing strategies.

Skills Covered:

- Python (Pandas, Matplotlib, Seaborn, Scikit-learn)
- EDA
- Data Preprocessing
- Unsupervised Learning (Clustering)

Project: Employee Attrition Analysis

Description:

Work on HR data to find patterns in employee turnover. Identify factors like department, salary level, or tenure that may influence attrition.

Skills Covered:

- SQL (joins, group by, filtering)
- Data Aggregation
- Power BI
- Exploratory Data Analysis

Project: Inventory Management Dashboard

Description:

Create an inventory monitoring tool for a fashion brand, analyzing product turnover, restocking needs, and stockouts.

Skills Covered:

- Excel/Power BI
- Inventory KPI Calculation (Turnover Rate, Sell-through Rate)
- Stock Level Monitoring
- Dashboard Design
- Supply Chain Analytics

Project: Fraud Detection in Insurance Claims

Description:

Analyze insurance claim datasets to identify patterns of potentially fraudulent activity using classification techniques.

Skills Covered:

- Python (EDA, Scikit-learn)
- Data Preprocessing
- Classification Models (Logistic Regression, Decision Trees)
- Anomaly Detection
- Model Evaluation (Precision, Recall, AUC)

Meet your mentors

With over 15 years of real-world experience each, they're here to simplify complex topics and share insights that truly stick.

They hail from top-tier institutes like **IITs and IIMs** and have worked at top global companies like **Google, Deutsche Bank, Deloitte, JP Morgan, IBM, Accenture, and Fractal Analytics** — bringing you real-world problem-solving skills straight from the frontlines.



Tulika Gupta
IBM, Accenture, LTI



Nikita Gupta
IIT KGP, Deutsche Bank,
Deloitte, JP Morgan



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