

12-Week Live Interactive Program

Master the complete **data** **analytics** lifecycle.

Transform from an absolute beginner to an industry-ready Data Analyst. This hands-on, project-based course walks you through building end-to-end analytical pipelines—from complex data wrangling in SQL and Excel to predictive Exploratory Data Analysis (EDA) using Python and Pandas.

★ 4.8 Rating

👤 1:1 Mentorship

🎧 24/7 AI Support

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analytics_pipeline.py
```

- > EXTRACTING DATA FROM SQL...
- > LOADING INTO PANDAS...
- > CLEANING MISSING VALUES...
- > Applying LLM code generation... [OK]
- > Generating Matplotlib visuals... [OK]
- > DEPLOYING TO POWER BI SERVICE.



Advanced Excel & Copilot AI

Master complex formulas, Power Query, and AI tools to automate analytical workflows.



Enterprise SQL & Optimization

Utilize advanced joins, window functions, and CTEs for enterprise database management.



Python Fundamentals

Build a solid coding foundation in Python data structures and functions for data analysis.



Data Wrangling & EDA

Clean and transform massive datasets using Pandas, NumPy, and AI assistance.



Data Visualization

Craft compelling visual narratives using Matplotlib, Seaborn, and Plotly.



Dashboarding with Power BI

Design and publish professional-grade, interactive reports using DAX.



LLM-Powered Analytics

Integrate Large Language Models to accelerate code generation and comprehensive reporting.



Skills You Will Learn



Exploratory Data Analysis



Advanced Data Cleaning



DB Management & Query Optimization



Cohort & Funnel Analysis



Interactive Data Visualization



AI-Assisted Code Generation



Statistical Analysis



ETL Pipeline Development

Tech Stack You Will Learn



Microsoft Excel



SQL



Python



Pandas & NumPy



Matplotlib & Seaborn



Power BI & DAX



LLMs



Microsoft Copilot

Learn From Industry Experts

Guided by leaders actively building and deploying enterprise data solutions.



Sampurn Rattan Jain

Data Science - Solution Architect



Experienced Architect: Over 10 years of experience designing end-to-end Data Science and AI solutions, with a strong focus on the BFSI landscape.



Domain Expertise: Diverse background delivering AI solutions across Energy Management, Healthcare, EdTech, and national security.



Advanced AI: Recently spearheaded the creation of virtual workers using multi-agentic frameworks for a large insurance organization.



Current Leadership: Leads the Data Science Practice at GeeksForGeeks, optimizing internal processes and mentoring students.



Ashish Jangra

Data Science Mentor



Experienced Educator: Over 5 years of experience mentoring and educating in the fields of Data Science and AI.



Massive Reach: Has successfully trained over 20,000 students across technologies like Machine Learning, Deep Learning, Computer Vision, and NLP.



Innovative Content Creator: Authored India's first Self-Driving Cars course alongside Elite Techno Groups.



Current Role: Actively serves as a Senior Data Science Mentor at GeeksforGeeks with a background as an AI trainer.



Priya Bhatia

Lead Data Scientist



Experienced Data Scientist:

Currently serves as a Lead Data Scientist at Turing, with a strong background delivering data-driven AI solutions at iNeuron and Thales.



Academic Excellence:

Holds a Master's degree in AI from IIT Hyderabad and was recognized with the prestigious Reliance Foundation scholarship.



Published Researcher:

Authored an IEEE-published research paper focusing on automated AI image segmentation for healthcare diagnostics.



Dedicated Educator:

Actively mentors students in Data Science and Machine Learning at GeeksforGeeks.



Jayan Gupta

Data Scientist



Expert Data Scientist:

Currently serves as a Data Scientist at GeeksforGeeks, possessing deep technical expertise in Data Science, Machine Learning, Deep Learning, and Generative AI.



Domain Expertise:

Proven track record of building and deploying real-world production systems across diverse sectors, including defence, finance, and ed-tech.



Massive Reach:

Has successfully mentored and guided over 12,000 students and working professionals in their tech careers.



Practical Approach:

Goes beyond theoretical concepts to show learners exactly how to build, deploy, and think like an industry professional.

12-Week Curriculum Journey

Structured for progression from spreadsheet basics to AI-assisted dashboards.

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Phase 1: Weeks 1-2

Excel & Copilot Foundations

Master data manipulation, logic, and dynamic dashboards while introducing AI automation.

- Math, Statistical, and Text Functions
- Lookup Functions (VLOOKUP, XLOOKUP) and INDEX MATCH
- Power Query Import & Pivot Tables
- Excel AI Integration with Copilot

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Phase 2: Weeks 3-5

Advanced SQL Analytics

Move past basic queries to handle enterprise-level data retrieval and aggregations.

- Aggregations, GROUP BY vs HAVING
- Deep Dive into Joins & Subquery Logic
- Window Functions (Rank, LAG, LEAD)
- Funnel analysis, Cohorts, and Retention using SQL

3

Phase 3: Weeks 5-7

Python Programming & Pandas

Learn Python fundamentals, data structures, and how to wrangle data powerfully with Pandas.

- Python Basics, Data Types, Conditionals & Loops
- Lists, Dictionaries, and Error Handling
- Pandas Series & DataFrames for Data Cleaning
- AI for Transformation scripts

4

Phase 4: Weeks 8-9

NumPy, EDA & Visualization

Perform numerical operations and build visual narratives with Matplotlib, Seaborn, and Plotly.

- NumPy Arrays & Statistical Operations
- Univariate and Bivariate EDA Workflow
- Customizations, Styling & AI Assisted Chart Scripts
- AI-assisted EDA automation

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Phase 5: Weeks 10-12

LLMs & Power BI Service

Integrate Large Language Models into your workflow and publish interactive dashboards using Power BI.

- Pandas code generation & Cleaning assistance via LLMs
- Power Query for ETL & Modeling best practices
- Advanced DAX, KPIs, & Time Intelligence
- Publishing to the Cloud using Power BI Service

Build a World-Class Portfolio

You will graduate with a robust portfolio featuring real-world applications.



Sales & Retail Analytics

Leverage Excel AI and Power Query to build e-commerce trackers, including full Sales Data and Myntra Analysis projects.



SQL Food Delivery Analysis

Apply advanced SQL aggregations and joins to analyze Restaurant Data and optimize Swiggy metrics.



Flight Price Analyzers

Perform data cleaning and recursive CTE extraction on Flight Price Analysis databases using advanced SQL.



Pandas AirBNB & IMDB Analysis

Transform data with Python Pandas using groupby and aggregate functions to analyze IMDB Movies and AirBNB data.



Automated Python EDA

Conduct Python Exploratory Data Analysis on Titanic Datasets, Netflix Titles, and global GDP using AI-assisted automation.



Power BI Sentiment Dashboard

Evaluate and publish interactive reports using advanced DAX to construct a comprehensive Sentiment Analysis dashboard.



Unmatched Support System

We ensure you never get stuck. Our ecosystem is designed to support you from day one to deployment.



Live Mentor Interaction

Direct access to industry professionals during live sessions.



AI Doubt Support

Use integrated tools to assist with debugging and code generation.



Interview Preparation

Dedicated guidance covering common SQL and Python interview patterns.

Industry Recognized





From Classes to Careers

Mastering these workflows positions you for the most in-demand roles in modern data science.

Data Analyst

Business Intelligence Analyst

Data Scientist

SQL Developer

Where Our Alumni Work



Microsoft



Google



Amazon



Accenture

Infosys

Infosys



Intel



Capgemini



Cognizant



Wipro



Salesforce



Airtel



TCS



Cisco



HCL



Oracle



Flipkart



Paytm



HP



Dell



Goldman
Sachs

 Dedicated "Project Storytelling" sessions included



Frequently Asked Questions

Do I need prior Python experience?

No, we start completely from the ground up covering Python Basics for Data Analysis, loops, functions, and data types .

Are Business Intelligence tools covered?

Yes! You will learn data modeling, Power Query for ETL, DAX, and publishing to the cloud using Power BI Service.

How is AI integrated into this course?

You will leverage AI tools like Copilot , learn to use LLMs for Pandas code generation , and evaluate AI tools for Power BI.

Will we build a portfolio?

Absolutely. You will build projects throughout the course, ranging from SQL Swiggy Analysis to an End-to-End Sentiment Dashboard.

Ready to master Data Analytics?

Join the live program and accelerate your career.

Call Us

08069289001

Email Us

courses@geeksforgeeks.org

Geeks Learning Together!

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