GenAI & Data Analytics Internship Program

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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

Internship Program Offerings

Real World Experience

Gain hands on experience working with real datasets, tools and business problems

Skill Development

Learn essential skill for data analysis like Python, SQL, Power BI, Excel

Career Direction

Get exposure to the analytics roles (Business Analyst, BI Analyst, Data Scientist)

Exposure to Business Domains

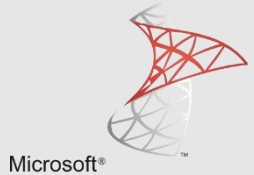
Understand how data analytics is applied across business domains

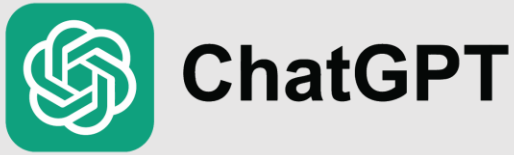
Program Highlights

Key Takeaways

- **13 Weeks** of training program
- **60+ hours** of self paced training lectures
- **AI application** across tools
- **Live** interaction with trainers and mentors
- **25+** Assignments and Case Studies
- **2+** Real-world Project Experience
- Internship Project
- Internship Certificate

Tools and Technologies Covered





Program Modules

Modules	Duration
Module 1: Python for Data Analytics	2 Weeks
Module 2: SQL for Data Analytics	3 Weeks
Module 3: Data Visualization with Power BI	3 Weeks
Module 4: Gen AI and Machine Learning	2 Weeks
Module 5: Internship Project	2 Weeks
*Bonus Module: Data Structure & Algorithms	At your pace
*Bonus Project	At your pace
Total Duration	**12 Weeks**

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Module 1: 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 2: 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
- 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

Module 3: 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, DAX and Relationships
- Data Visualization: KPIs and Card, Bar Charts, Line Charts, Table, Matrix, MAP etc.
- Adding Interactivity: Slicers, Drill through, Tooltips, Bookmarks
- Power BI Service: Publishing and Sharing Reports
- Power BI Gateway – Data Refresh Automation
- Implementing Row-Level Security (RLS)

Module 4: Gen AI and Machine Learning

Introduces GenAI 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

BONUS MODULE - Data Structures & Algorithm

This Data Structures & Algorithms (DSA) curriculum is designed to build a strong foundation in problem-solving, algorithmic thinking, and efficient data handling. It progressively covers fundamental to advanced concepts through hands-on practice, real-world examples, and algorithmic patterns used in technical interviews and industry systems.

Relevance: Mastering DSA is essential for writing high-performance code, excelling in coding interviews, and solving complex problems in real-world applications like search engines, operating systems, financial systems, and large-scale data platforms

Topics:

- Algorithm Foundations & Complexity Analysis
- Linear Data Structures
- Non-Linear Data Structures
- Hashing and Advanced Data Structures
- Searching, Sorting & Algorithm Design Techniques
- Advanced Problem Solving Techniques

Internship 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

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

Bonus Projects

Fraud Detection in Insurance Claims using Python, Machine Learning and Power BI

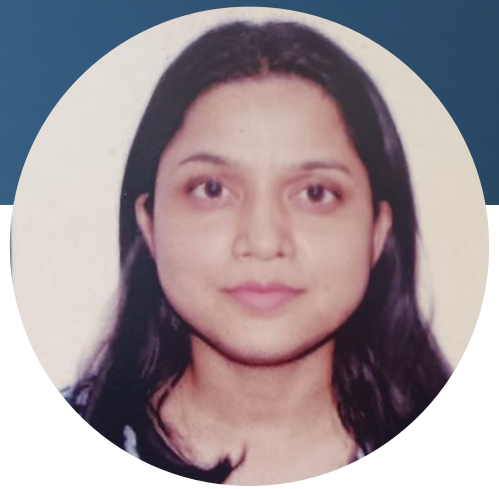
Product Reviews Aggregation and Summarization tool using Python and Generative AI

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.

Tulika Gupta
IBM, Accenture, LTI



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