2026 EDITION

VIGNAN
TECH ACADEMY

🚀 AI POWERED COURSE

Data Analytics Masterclass

Your complete roadmap to becoming a job-ready Data Analyst with hands-on projects, real-time tools, and industry-aligned curriculum.

1.5M+	30%	6
Job Opportunities	Annual Growth Rate	Industry Modules

WHAT YOU'LL LEARN

01 AI · 02 Python · 03 SQL · 04 Excel · 05 Power BI · 06 Statistics

SALARY EXPECTATIONS (INR / YEAR)

LEVEL	STARTING	UPPER RANGE
Freshers (0–2 yrs)	₹3,50,000	₹9,00,000
Mid-Level (3–5 yrs)	₹10,00,000	₹20,00,000
Senior (5+ yrs)	₹22,00,000	₹40,00,000

📞 9703974890 • 🌐 www.vignantechacademy.com

Explore Artificial Intelligence, Machine Learning, Deep Learning, and Generative AI. Master LLMs, prompt engineering, and cutting-edge tools like ChatGPT, Galaxy AI, and Julius AI.

1. Introduction to AI
2. Brief History and Evolution of AI
3. Importance of AI in Today's Data-Driven World
4. AI vs ML vs Deep Learning vs GenAI
5. What is Machine Learning
6. Basics of NLP (Natural Language Processing)
7. What is Deep Learning
8. Introduction to Neural Networks
9. Why Deep Learning is Critical in GenAI
10. What is Generative AI & Key Types
11. What are LLMs? How LLMs are Trained
12. Prompt Engineering Fundamentals
13. Strengths and Limitations of LLMs
14. **Popular GenAI Tools & Platforms**
    ▸ ChatGPT · ▸ Copilot · ▸ Gemini
15. **GenAI Use Cases in Data Analytics**
    ▸ Data Collection · ▸ Data Cleansing · ▸ Exploratory Analysis · ▸ Visualization & Storytelling · ▸ Forecasting
16. Ethics, Bias and Limitations of AI
17. AI Agents – Real-Time Analytics with AI
18. **Galaxy AI** — Rapid data analysis for immediate insights
19. **Julius AI** — Quick data insights & visualizations without coding

MODULE 02

🐍 Python Programming

Master Python from fundamentals to data analysis — core concepts, data structures, NumPy, Pandas, Matplotlib, Seaborn, and real-time project work.

1. Introduction to Python
2. Data Types in Python
3. Operators & Variables
4. Arithmetic and String Operations
5. For Loop, User Input & While Loops
6. Control Statements & Functions
7. Lists, Tuples, Sets & Dictionaries
8. NumPy — Numerical Computing
9. Pandas — Data Manipulation
10. Data Visualization with Matplotlib
11. Data Visualization with Seaborn
12. Case Studies: Visualizations with Matplotlib & Seaborn
13. Data Cleaning using Python
14. Univariate, Bivariate & Multivariate Analysis
15. 🔨 **Project Work (Real Time)**

MODULE 03

🗄️ SQL

Gain expertise in database design, query writing, and advanced SQL — from basic commands to window functions, CTEs, triggers, and real-time projects.

1. Introduction to SQL & Database Design
2. Data Warehouse Concepts
3. SQL Data Types & Operators
4. DDL, DML & DQL Commands
5. DCL & TCL Commands
6. WHERE, HAVING, ORDER BY, LIMIT & OFFSET
7. Group By & Joins
8. Window Functions
9. Case Statements & CTEs
10. Sub Queries & Frames in SQL
11. LEAD() & LAG() Functions
12. Views & Triggers
13. 🔨 **SQL Project Work (Real-Time Live Project)**

MODULE 04

📊 Microsoft Excel

Build strong spreadsheet skills — formulas, functions, conditional formatting, LOOKUP/INDEX-MATCH, Pivot Tables, and Macros for data analysis.

1. Introduction to Excel
2. Sort & Filter in Excel
3. Basic Formatting I & II
4. Text Functions & Statistical Functions
5. Logical Functions
6. Conditional Formatting I & II
7. LOOKUP Functions
8. INDEX and MATCH Functions
9. PIVOT Tables & PIVOT Charts
10. Recording Macros

From data connectivity and modelling to DAX, advanced visualizations, Power BI Service, Row-Level Security, and interactive dashboard projects.

1. Overview of Power BI & Ecosystem
2. Power BI vs Tableau vs Excel
3. Interface, Setup & Data Sources
4. Import vs. DirectQuery Mode
5. Data Gateway & Connectivity Best Practices
6. Power Query Editor & Data Cleaning
7. Merging, Appending & Column Transformations
8. Star & Snowflake Schema, Relationships, Cardinality
9. Fact & Dimension Tables, Performance Optimization
10. Introduction to DAX — Measures vs. Calculated Columns
11. DAX Functions: SUMX, CALCULATE, FILTER, Time Intelligence
12. Dashboard Design, Slicers, Filters & Bookmarks
13. Advanced Visuals, Drill-Through, Tooltips & AI Visuals
14. Themes, Branding & Publishing to Service
15. Workspaces, Dataflows & Dataset Management
16. Data Refresh, Subscriptions & Content Packs
17. Row-Level Security (Static & Dynamic)
18. User Roles, Access Control & Secure Sharing
19. Performance Analyzer & Bookmarks
20. 🔨 **Interactive Dashboard (Real-Time Project)**

MODULE 06

📐 Statistics

Build a solid foundation — measures of central tendency, dispersion, probability distributions, sampling, and hypothesis testing for data-driven decisions.

1. Measures of Central Tendency: Mean, Median, Mode
2. Measures of Dispersion: Range, Variance, Std Deviation
3. Interquartile Range (IQR)
4. Basics of Probability
5. Normal Distribution
6. Poisson Distribution
7. Binomial Distribution
8. Skewness, Percentiles & Quartiles
9. Sampling and Sampling Distribution
10. Hypothesis Testing: Null & Alternative Hypotheses
11. P-value, Type I & Type II Errors

VIGNAN
TECH ACADEMY

Ready to Launch Your Data Analytics Career?

Enroll now and join thousands of successful data analysts 🚀

9703974890

www.vignantechacademy.com

VIGNAN TECH ACADEMY · WHERE CAREERS BEGIN