

# DATA ANALYST

## With Gen AI Tools

By The IoT Academy

THE  
**FUTURE**  
STARTS HERE

Aspirations of Candidates  
Seeking Assistance.



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[www.theiotacademy.co](http://www.theiotacademy.co)

#BROCHURE



## About The Program

The Data Analytics with Gen AI Tools program is a 5-month, 120-hour immersive course designed to equip learners with practical data skills and GenAI proficiency. It begins with core analytics tools—Excel, SQL, and Python—followed by deep dives into data cleaning, statistics, and exploratory data analysis. Learners then master data visualization using Power BI or Tableau and gain exposure to essential machine learning techniques like regression, clustering, and classification.

This program uniquely integrates Generative AI, teaching LLMs, prompt engineering, and tools like ChatGPT, pandas-ai, and LangChain to automate tasks and build executive dashboards. It includes hands-on mini-projects and a final capstone using Python, SQL, and GenAI to solve real business problems.

### *In Association With*

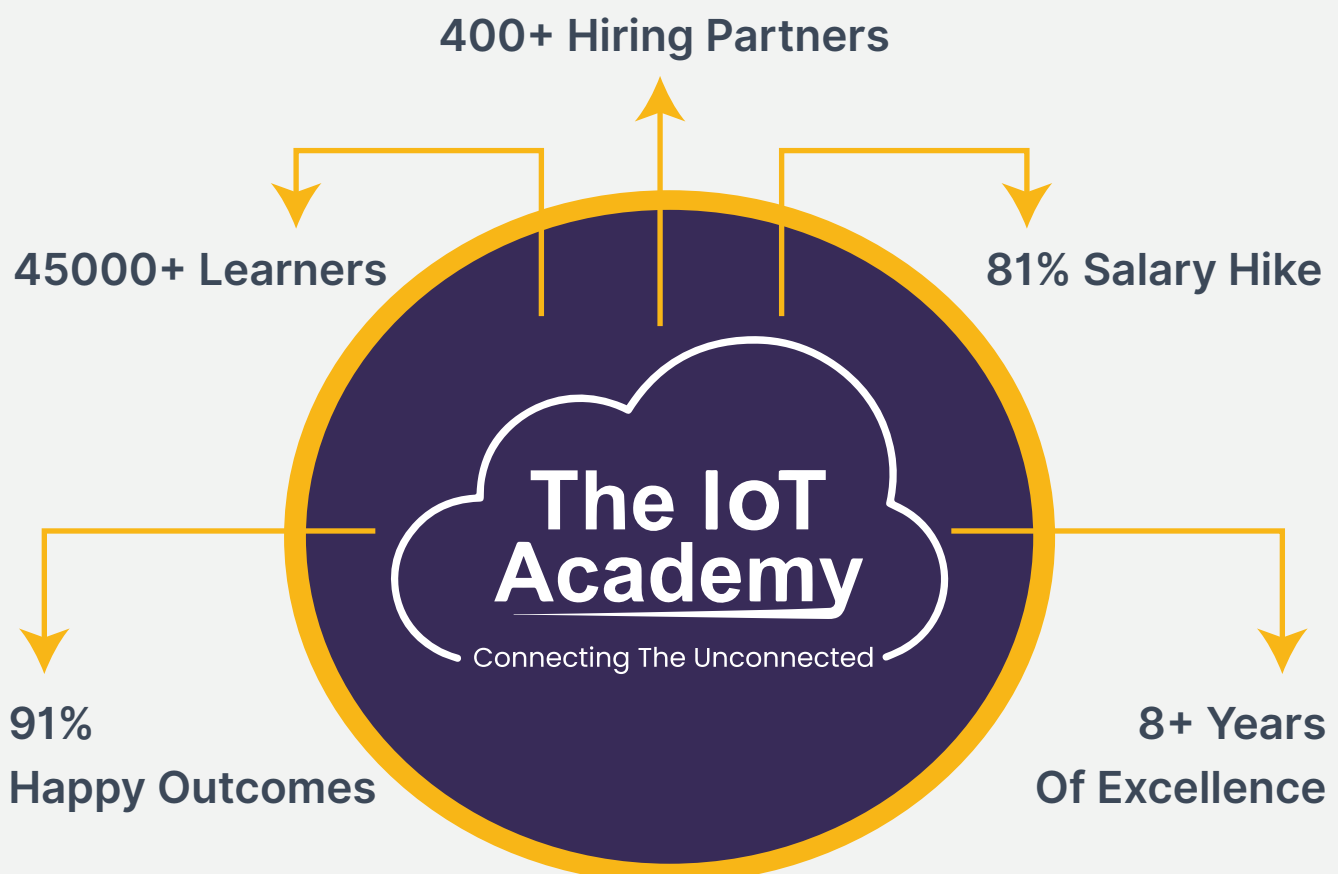


## About The IoT Academy

The IoT Academy, established in 2017 is a fast emerging company imparting quality programs for skills training, internship and guidance in cutting edge technologies like **Data Science, Machine Learning, Artificial Intelligence, Internet of Things, Embedded Systems & many more** and focused on helping people develop the skills they need to thrive in the rapidly growing digital economy.

The IoT Academy has collaborated with various premier institutes e.g. **E&ICT Academy, IIT-Guwahati, IIT-Roorkee and IIT-Kanpur** for **Advance Certification courses** to take provide outcome-centric solutions to help them achieve their professional goals.

“Empowering learners to discover, innovate, and create brighter futures through transformative education.”





## Why Is **Data Analyst With Gen AI Tools** Important?

insights from data, Generative AI enhances their work by automating reports, creating visualizations, and speeding up analysis. This powerful combo drives smarter decisions, greater efficiency, and innovation in fields like healthcare, finance, and business.

Our course equips you with the skills to thrive in this AI-powered era—whether you're starting out or looking to upskill.

Virtual Personal Assistants

Social Media Services

Email Spam and Malware Filtering

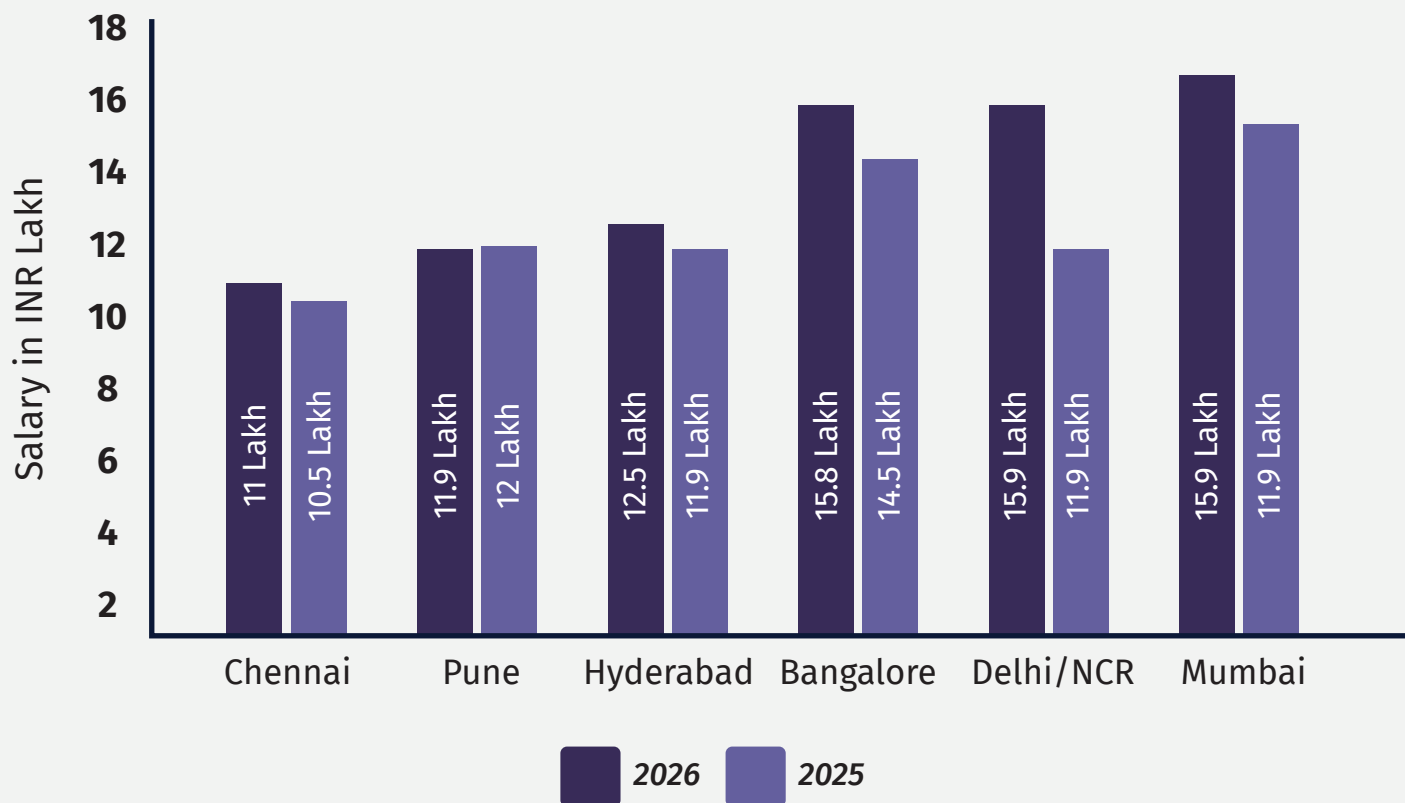
Search Engine Result Refining

Online Fraud Detection

Product Recommendations

## Current Trends In DS & ML Job Market

As per Gartner, Data Analyst will create 23 Lakhs job openings by 2025-26. The average annual salary of an DA, DS & ML in India is: Freshers: Between ₹ 6,99,807-8,91,326 Experienced: Between ₹ 35,00,000 - 50,00,000 (Salary per annum).



Source- Analytics India Magazin





## Program Benefits



### Practical Knowledge

Live instructor-led online classes by industry experts.



### Personalised Attention

Dedicated technical and non-technical teams to resolve all your doubts.



### Curriculum

Curriculum designed by experienced professors and industry experts.



### Doubt Clearing Sessions

24x7 subject matter expert support for your technical/non-technical doubts



### Support and Guidance

Lifetime access to our Learning Management System and Program Support



### Certificate/Credentials

Certificate of Completion from The IoT Academy



### Career Guidance and 100% Placement Support

Complete access to a plethora of our Career Assistance and Placement Services.



### Immersive Learning Experience

A unique learning ecosystem to give you an offline-like immersive experience



## Module 1 : Python Basics

- Introduction To Python
- Writing and executing first python program
- Python language fundamentals
- Python conditional statements
- Looping statements
- Standard data types
- String handling
- Python list
- Python tuple
- Python set
- Python dictionary
- Python functions
- Modules & packages
- File I/O
- Object oriented programming
- Exception handling
- GUI programming
- Multi-threading programming
- Regular expressions(Regex)
- Numpy Package
- Pandas Package
- How to load datasets
- Accessing data from Data Frame
- Data Visualization using matplotlib and seaborn packages

## MONTH 2

|          |                 |           |          |          |          |          |
|----------|-----------------|-----------|----------|----------|----------|----------|
| Module 1 | <b>Module 2</b> | Module 3  | Module 4 | Module 5 | Module 6 | Module 7 |
| Module 8 | Module 9        | Module 10 |          |          |          |          |

### Module 2 : SQL

- Introduction to Database
- SQL (Structured Query Language)
- SELECT, WHERE, GROUP BY, JOINS
- Filtering and sorting
- Basic aggregations
- Intermediate
- Subqueries
- Window functions
- Case statements

## MONTH 3

|          |          |                 |          |          |          |          |
|----------|----------|-----------------|----------|----------|----------|----------|
| Module 1 | Module 2 | <b>Module 3</b> | Module 4 | Module 5 | Module 6 | Module 7 |
| Module 8 | Module 9 | Module 10       |          |          |          |          |

### Module 3 : Statistics

- Introduction to Statistics
- Measures of Central Tendency
- Data Distributions
- Hypothesis Testing



## MONTH 4

Module 1    Module 2    Module 3    **Module 4**    Module 5    Module 6    Module 7  
Module 8    Module 9    Module 10

### Module 4 : EDA

- Describe()
- Groupby()
- Crosstab()
- Boolean slicing/query()
- Data Manipulation & Cleaning
- Categorical Data Encoding
- Handling Date and Time

## MONTH 4

Module 1    Module 2    Module 3    Module 4    **Module 5**    Module 6    Module 7  
Module 8    Module 9    Module 10

### Module 5 : Power BI

- Introduction to power bi
- Data visualization
- Power bi service, publishing & sharing
- Data transformation shaping & combining data
- Data modeling & DAX

## MONTH 5

Module 1    Module 2    Module 3    Module 4    Module 5    **Module 6**    Module 7  
Module 8    Module 9    Module 10

### Module 6 : Tableau

- Tableau introduction
- Comparing tableau with power bi
- Dimension & measure
- Tableau charts
- Tableau filters
- Tableau dashboards
- Tableau story
- Calculated fields
- Publishing report to server

## MONTH 6

Module 1    Module 2    Module 3    Module 4    Module 5    Module 6    **Module 7**  
Module 8    Module 9    Module 10

### Module 6 : Advanced Excel

- Advanced excel course-overview of the basics of excel
- Working with functions
- Advanced excel course data validations
- Advanced excel course-working with templates
- Advanced excel course- sorting and filtering data
- Advanced excel course-working with reports
- Advanced excel course more functions
- Advanced excel course- sorting and filtering data
- Advanced excel course-macros
- Advanced excel course-whatIf analysis
- Advanced excel course-new features of excel
- Advanced excel course-final assignment

## Module 6 : VBA (Visual Basic For Application) & Macros

- Create a macro
- MsgBox
- Workbook and worksheet object
- Range object
- Variables
- If then statement
- Loop
- Macro errors
- String manipulation
- Data and time
- Events
- Array
- Function and sub
- ActiveX controls
- User form

MONTH 5

Module 1

Module 2

Module 3

Module 4

Module 5

Module 6

Module 7

Module 8

**Module 9**

Module 10

## Module 9 : GenAI for Automation & Analysis

- ChatGPT/Copilot for Python, SQL, and Excel automation
- GenAI for EDA & report generation (pandasai, gpt-engineer)
- No-code AI tools: Zapier, Flowise, Claude, Gemini

MONTH 5

Module 1

Module 2

Module 3

Module 4

Module 5

Module 6

Module 7

Module 8

Module 9

**Module 10**

## Module 10 : GenAI-Enhanced Business Case Studies

- AI-Driven Case Analysis
- AI-Powered Slide Presentations
- Data-Backed Decision Making with GenAI
- **Capstone Project:** Automated Data Cleaning + AI Report Generation

### **Live Career-Oriented Webinars**

Live webinar sessions that include curriculum and career services walk through to help learners understand their learning objective and expectations of hiring managers.

### **Leadership Skill Development Sessions**

Recurring training sessions with experts to help learners develop Interpersonal & Leadership Skills.

### **1-on-1 Career Mentoring Sessions**

One-on-one Career Mentoring sessions on how to develop the right skills and attitude to secure a dream job.

### **Exhaustive Interview Preparation**

Expert tips, sample interview questions, mock interviews with constructive feedback from industry experts to gain hands-on experience of technical rounds, HR round, and more.

### **Job Search Assistance & Job Feeds**

Access to multiple job portals to help learners navigate through thousands of jobs including global remote jobs.

### **Profile Building Assistance**

A dedicated Career Coach will provide expert tips on how to create an attractive, relevant resume and LinkedIn profile.



## Live Industry-Based Projects

Industry projects are an integral part of the Data Analyst with Gen AI course. These projects provide hands-on exposure to real-world challenges, equipping you with practical experience.

### Weather Trends Analysis

Study past weather data to find patterns, like which months are hottest or when it usually rains.



### Stock Market Trends

Analyze past stock prices to spot trends and big changes in the market.



### Customer Segmentation for Shops

Group shop customers by how they buy things to help stores sell better and plan offers.



### Product Review Sentiment Analysis

Study online reviews to learn what customers like or dislike about a product.





## Learners Demographics



**Satyam**

I&F Decision Practitioner  
Senior Analyst



**S. Shahidha Banu**

Assistant Professor



**Sampa Barman**

Assistant Professor



**Rohit Singh Parihar**

Data Scientist



**Ravi Teja**

Pricing Analyst



**Rijul Bajaj**

Data Analyst



**Swati Verma**

Data Architect



**Ritika Chettri**

Consultant-M&E and Data Analyst



**Mr Swapnil Bhanushali**

Senior Associate



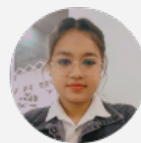
**Bhaskariyoti Goswami**

IT CSV, Digitization



**Saumya Singh**

Project Manager - Mainframe



**Anushi Mittal**

Business Analyst



**Hemant Raj**

Assistant Engineer R&D



**Tanu Chinwan**

Placed In



**Vaishali Singh**

Placed In



**Vidit Kumar Pal**

Placed In



### Corporates Who Hired form Us



## What's In It For You

### Entry-Level:

- Junior Data Analyst
- Data Analyst Intern
- Business Intelligence (BI) Analyst

### Mid-Level:

- Data Analyst
- Business Data Analyst
- Data Visualization Specialist

### Senior-Level:

- Senior Data Analyst
- Analytics Manager
- Data Science Lead

## Program Faculty **Industry Experts**



**Kaushlendra Sisodia**

Director At Uniconverge Technologies  
Pvt. Ltd.  
IIT Kanpur Alumnus



**Prof. Gaurav Trivedi**

Electronics & ICT Academy  
IIT Guwahati



**Mr. Sanjay Aggarwal**

Data Science With  
ML Expert IMS BHU Alumni  
The IoT Academy



**Prof. Sumit Kalra**

Department Of Computer  
Science & Engineering,  
IIT Jodpur



**Ashwani Kumar**

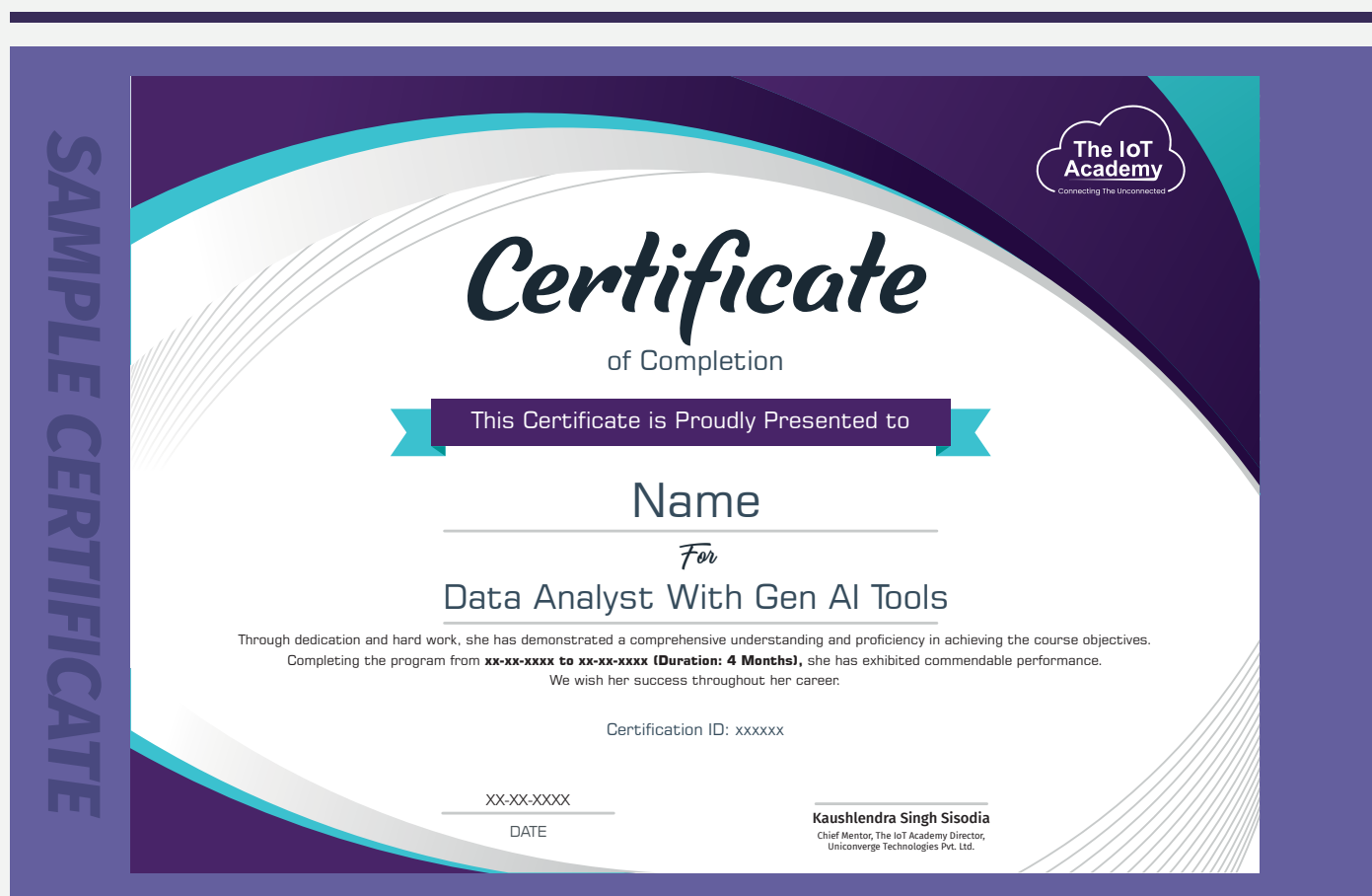
AI Expert 20+ Years  
Of Experience Alumni Of  
University Of Miami

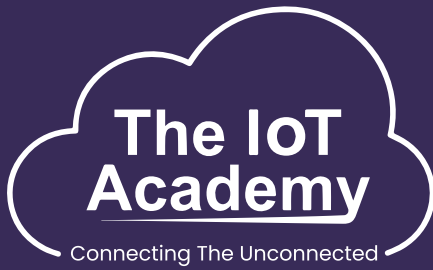


## Certification

Upon successfully completing this program, you'll earn Certification In **Data Analyst With Gen AI Tools** by The IoT Academy.

This certificate will testify to your skills as an expert in **Data Analyst With Gen AI Tools**.

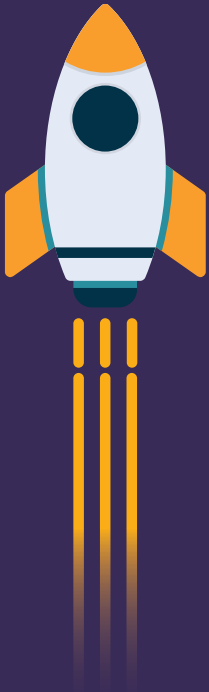




# THANK YOU!

## Data Analyst With Gen AI Tools

By The IoT Academy



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OFFICE**

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Uttar Pradesh

**TRAINING  
CENTRE**

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Uttar Pradesh