

# Advanced Certificate in Gen AI Powered Data Science with Machine Learning

Hands-On Training with  
15+ Live Projects

Free Access to 12+  
Programming Tools

2 Months Guided  
Industry Projects

2 Masterclasses  
by IIT-B Faculty

Now with Top-Tier Add-On Certification\*



Now Integrated with  
Generative AI & ChatGPT

## Our Learners Work At



# Why Choose upGrad?



## Industry-Ready Curriculum

Designed by industry professionals to reflect the latest hiring trends in Data Science & AI, ML courses.



## Guided Industry Projects with Mentorship

Work on real-world projects with 1:1 mentorship.



## Masterclasses by Industry Professionals

Exclusive sessions on real-world best practices and emerging tech.



## 3 Years Access to Career Portal

Get access to jobs, internships and hiring drives even after graduation.



## Hands-on Training with Live Projects

Build real-world applications & gain confidence through the Advanced Certificate in Gen AI Powered Data Science with Machine Learning.



## 3 Years Access to Learning Portal

Get membership to learner management system with free built-in tools to practice real-world learning.



## 5Ps of Learning Methodology

Pre-class | Perceive | Practice | Problem-Solving | Projects

## Program Highlights



**6000+**  
Career Transitions



**1200+**  
Hiring Partners



**15 LPA**  
Highest CTC



**4.7 LPA**  
Average CTC

## 360° Career Support



**Aptitude Training**



**Resume Building**



**LinkedIn Profile Evaluation**



**Interview Question Bank**



**1:1 Mock Interview Calls**



**Hands-on Technical Learning**



**Soft Skill Training**



**GD/Interview Prep**

## Career Transitions



**KRANTI PATIL**  
Sr. Data Consultant

Infosys

CTC 15 LPA



**MANSI KODGIRE**  
Specialist Programmer

Infosys

CTC 9.5 LPA



**SANTOSH RATH**  
Systems Engineer

tcs TATA  
CONSULTANCY  
SERVICES

CTC 7 LPA



**DHANSHRI JAGDALE**  
Sr. Business Dev. Associate

Academor

CTC 6.5 LPA

## Course 1: Excel & GenAI for Analytics

### Study

- Excel For Business Problem-solving (CRISP-DM).
- Advanced Formulas, Logical Functions & Analytics Tools.
- Goal Seek, Scenario Manager & Data Tables.
- GenAI For Formula Generation, KPI Explanation & Summaries.

### Create

- Superstore Sales Dashboard With GPT
- Automated Reports Using VBA + Gen AI
- Real-world Demand Simulation On Kaggle Datasets

### Attempt

- 50+ Excel Interview Questions
- Problem-solving & KPI Explanation Practice
- Scenario-based Excel Tests

## Course 2: Power BI & Tableau

### Study

- End-to-end ETL & Data Modeling.
- DAX Fundamentals to Advanced Use Cases.
- Power BI & Tableau Visual Analytics.
- Data Storytelling With Gen AI-assisted Narratives.

### Create

- Home Loan Default Dashboard (DAX Case Study)
- Retail & Superstore Profitability Dashboards
- Dynamic Tableau Dashboards with Parameters & Joins

### Attempt

- 100+ DAX & BI Questions
- Dashboard Critique & Storytelling Exercises
- BI Scenario-based Case Studies
- 4 Weekly Tests

## Course 3: SQL (with Cloud Integration)

### Study

- Relational Databases & ER Modeling.
- Advanced SQL: Joins, Subqueries, Window Functions.
- Query Optimization Using GenAI.
- SQL + Azure Cloud Integration.

### Create

- RSVP Movie Database
- Marketplace Demand-Supply Analysis
- Cloud-Connected Analytics Workflows

### Attempt

- 200+ SQL Interview Questions
- Complex Joins & Case-Based Problems
- 1 Employability Test
- 2 Weekly Tests

## Course 4: Python for Data Analysis

### Study

- Python Fundamentals, Logic & Data Structures.
- Functional Programming & OOP.
- NumPy, Pandas & Data Visualization.
- EDA Techniques With Genai Support.

### Create

- Credit Risk Analysis
- Uber Trip Demand Analysis
- Stock Market Analysis Using Yfinance

### Attempt

- 250+ Python Coding Questions
- OOP & EDA Interpretation Tests
- LeetCode & Real-Dataset Challenges
- 1 Employability Test

## Course 5: Statistics & Probability (AI-assisted)

### Study

- Descriptive & Inferential Statistics.
- Hypothesis Testing, ANOVA & Chi-square.
- Statistical Interpretation Using AI Tools.

### Create

- Customer Churn Distribution Analysis
- Bank Credit Scoring Statistical Report

### Attempt

- Statistics Problem Sets
- Business Interpretation & Decision-based Tests

## Course 6: AI & Machine Learning

## Study

- 18+ ML Algorithms & ML Pipelines.
- Feature Engineering & Hyperparameter Tuning.
- Model Explainability (SHAP, LIME).
- Deep Learning: CNNs, RNNS, LSTMS.
- Generative AI, RAG & LLM Workflows.
- Prompt Engineering For NLP, Vision & Agents.

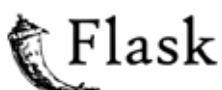
## Create

- Credit Risk & Churn Prediction ML Models
- Demand Forecasting System
- LLM-powered Apps (Chatbots, Semantic Search)
- Model Deployment Using Flask, Streamlit & Gradio

## Attempt

- ML & AI Case-study Questions
- Model Evaluation & Explainability Tests
- End-to-end Capstone Project

## Tools & Technologies Covered



# upGrad



1800 210 7070

## upGrad Learning Support Centre

---

Ahmedabad | Bangalore | Belagavi | Bhilwara | Bhopal | Bhubaneswar  
Bilaspur | Coimbatore | Dehradun | Gurugram | Hyderabad | Indore  
Jabalpur | Jaipur | Kolkata | Lucknow | Mangalore Panchkula | Pune  
Raipur | Rajkot | Sambhaji Nagar

Disclaimer: upGrad is not a university or college. The certificate programs offered are professional upskilling programs intended to support career advancement. Learner testimonials reflect individual experiences and may vary. Any statistics or outcomes mentioned are influenced by multiple factors, and individual results can differ. Past performance is not indicative of future outcomes. Company names and logos are used only as representative examples of learner employment or participation in hiring drives; they do not imply guaranteed placement, formal partnership, or endorsement. Masterclasses may feature professionals with experience at leading organizations; this does not constitute endorsement by those companies. Terms & Conditions apply