



DataTeach.ai

Affordable AI Education



## CAREER CATALYST

From campus to career, faster

A placement focused Data,  
Analytics & AI skill program.

[www.datateach.ai](http://www.datateach.ai)

# Why DataTeach.ai?

- 🏠 Training by industry experts
- 🏠 Industry-oriented curriculum
- 🏠 Live instructor-led session
- 🏠 Mentorship
- 🏠 Life-time LMS access
- 🏠 Daily assessments, module-wise assessments, weekly assessments, monthly grand test
- 🏠 Internships
- 🏠 Resume & portfolio building
- 🏠 Mock interviews
- 🏠 100% placement assistance



## OUR PROGRAMS

Data Science + Generative AI

Data Analytics + Generative AI

### DURATION

24 weeks (6 months)

### WEEKLY LOAD

10 hours

### TOTAL HOURS

240 + live training hours

### OUTCOME

Entry-level roles in

Data Analyst

Python Developer

Jr. Data Scientist

AI Engineer (Fresher)

ML Engineer

GenAI Engineer

# Data Science with Gen AI

## Month 1 : Programming & Foundations

### MODULE 1 :

Python Programming (Weeks 1-4)

#### GOAL :

Build strong coding & logical thinking skills

#### TOPICS :

- Python basics, variables, data types
- Conditional statements, loops
- Functions & recursion
- List, tuple, set, dictionary
- Strings
- File handling
- Exception handling
- OOPs in Python
- Coding best practices

#### HANDS-ON PROJECTS

- Student result management system
- Employee payroll system
- ATM simulation program
- Mini library management tool

#### OUTCOME:

Write clean Python code, Crack Python coding rounds



## Month 2 : Data Handling & Business Tools



### MODULE 2 :

Excel for Data Analysis (Weeks 5-6)

#### TOPICS :

- Advanced formulas (VLOOKUP / XLOOKUP, IF, COUNTIF)
- Pivot tables & charts
- Data cleaning techniques
- Dashboards & reporting
- Business use cases

#### PROJECT :

- Sales performance dashboard



## MODULE 3 : SQL for Data Analysis (Weeks 7-8)

### TOPICS :

- Database concepts
- SELECT, WHERE, GROUP BY
- Joins (Inner, Left, Right, Outer)
- Subqueries
- Window functions
- Real-world query scenarios

### PROJECT :

- E-commerce database analysis
- Employee performance SQL case study

**OUTCOME:** Ready for SQL rounds

## Month 3 : Data Analysis & Statistics

## MODULE 4 : Data Analysis with Python (Weeks 9-10)

### TOOLS :

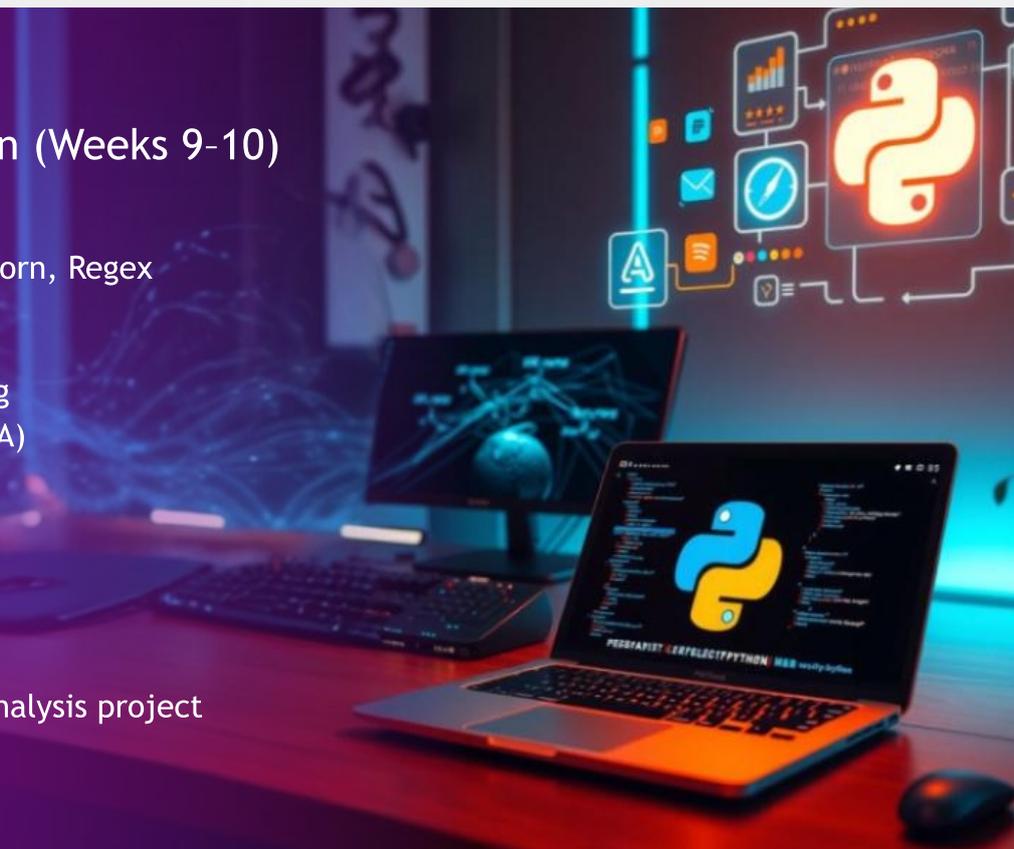
NumPy, Pandas, Matplotlib, Seaborn, Regex

### TOPICS :

- Data cleaning & preprocessing
- Exploratory Data Analysis (EDA)
- Data visualization
- Feature engineering
- Handling missing data

### PROJECTS :

- Zomato / Netflix / IPL data analysis project



## MODULE 5 :

Statistics for Data Science (Weeks 11-12)

### TOPICS :

- 🔗 Descriptive statistics
- 🔗 Probability
- 🔗 Distributions
- 🔗 Hypothesis testing
- 🔗 Correlation & regression
- 🔗 A/B testing

### PROJECT :

- 🔗 Customer behavior statistical analysis report



**OUTCOME:** Strong analytical thinking, Confidence in DS interviews

## Month 4 : Visualization & Machine Learning

## MODULE 6 :

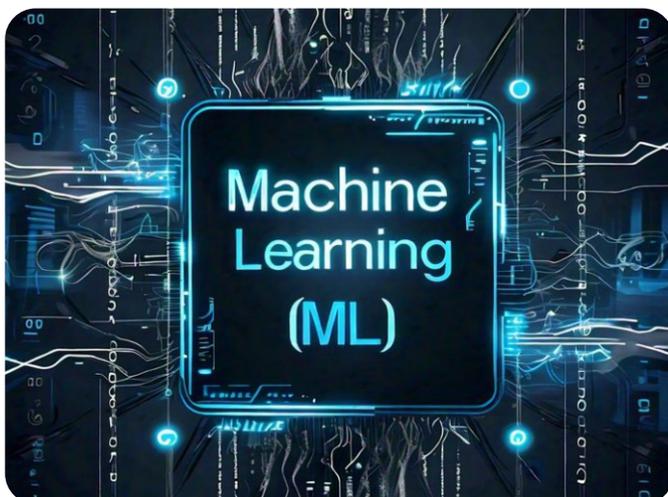
Power BI (Weeks 13-14)

### TOPICS :

- 🔗 Power BI interface
- 🔗 Data modeling
- 🔗 DAX basics
- 🔗 Interactive dashboards
- 🔗 Business storytelling

### PROJECT :

- 🔗 Executive business insights dashboard



## MODULE 7 :

Machine Learning (Weeks 15-16)

### TOPICS :

- 🔗 ML workflow
- 🔗 Supervised & unsupervised learning
- 🔗 Regression & classification
- 🔗 Decision trees & random forest
- 🔗 KNN, Naive Bayes
- 🔗 Model evaluation

### PROJECT :

- 🔗 5 projects on ML

**OUTCOME:** End-to-end ML project confidence

## Month 5: Deep Learning & NLP

### MODULE 8 :

Deep Learning (Weeks 17-18)

#### TOOLS :

TensorFlow / Keras

#### TOPICS :

- ⊗ Neural Networks
- ⊗ Backpropagation
- ⊗ ANN & CNN
- ⊗ Activation Functions
- ⊗ Model Optimization

#### PROJECT :

- ⊗ Handwritten Digit Recognition (MNIST)



### MODULE 9 :

Natural Language Processing  
(Weeks 19-20)

#### TOPICS :

- ⊗ Text Processing
- ⊗ TF-IDF, Word Embeddings
- ⊗ Sentiment Analysis
- ⊗ Text Classification
- ⊗ Chatbot Basics
- ⊗ BERT Model (Basics)

#### PROJECT :

- ⊗ Movie Review Sentiment Analyzer
- ⊗ Resume Screening NLP Model

## Month 6 : Computer Vision & Generative AI

### MODULE 10 :

Computer Vision (Weeks 21-22)

#### TOPICS :

- 🔗 Image processing basics
- 🔗 OpenCV
- 🔗 Face detection
- 🔗 Object detection & tracking
- 🔗 CNN for vision tasks

#### PROJECT :

- 🔗 Face recognition-based attendance system
- 🔗 Object detection & counting in live video



### MODULE 11 :

Generative AI (Weeks 23-24)

#### TOPICS :

- 🔗 LLM fundamentals
- 🔗 Prompt engineering
- 🔗 Transformers
- 🔗 OpenAI / open-source models
- 🔗 RAG concepts
- 🔗 AI agents overview

#### PROJECT :

- 🔗 Build a simple Gen-AI application using prompts and an LLM

# Final Outcomes (Job-Ready Guarantee)

By the end of Career Catalyst, students will have:

- 🔗 15+ real-world projects
- 🔗 Strong GitHub portfolio
- 🔗 Resume & LinkedIn optimization
- 🔗 Mock interviews & aptitude prep
- 🔗 Industry-level problem-solving mindset

Roles students can apply for:

- 🔗 Python Developer
- 🔗 Data Analyst
- 🔗 Junior Data Scientist
- 🔗 Business Analyst
- 🔗 AI/ML Engineer
- 🔗 ML Engineer (Fresher)
- 🔗 DL / CV Engineer (Fresher)
- 🔗 GenAI Engineer



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