



PYTHON • DATA • CLOUD • AI - CAREER ROADMAP

The Journey of Praksh the Trailblazer

Crash Course Edition - For working coders who want the fastest serious route into data & AI

● 30 live sessions

● 5 sessions / week

● ≈ 6 weeks

● 4 career tracks • 3 job roles

[Book Your Free Demo Class →](#)

One click • zero cost • meet your mentor before you decide

Code · Learn · Innovate

Praksh Academy is a personal, one-on-one coding academy that takes learners from their very first line of Python to job-ready skills in **Data Analysis, Cloud Data Engineering and AI/ML** - taught live, practised live, and measured module by module. No crowded batches, no passive video courses: every class is built around one student and their pace.

5+

Years in Data Engineering

300+

Students mentored globally

3

Industry roles · Analyst to AI

4

Career tracks in one journey

MEET YOUR MENTOR

Prabhanjan - learn from someone who does this job every day

Your mentor, **Prabhanjan**, has spent 5+ years working across the exact roles this roadmap leads to - analyst, instructor, and data & AI engineer - and has mentored **300+ students globally**. Everything taught here is what the industry actually uses, not textbook theory.

- **Data & AI Engineer · MapUp**
Building large-scale data & AI systems in production - current role
- **Senior Coding Instructor · Codingal**
Taught programming to hundreds of students across the globe
- **Data Analyst · Jade Global**
Delivered analytics and reporting for enterprise clients

I built Praksh Academy around one belief: anyone can master data and AI if the path is planned well and someone walks it with them. I have walked this exact road myself - from my first line of Python to building AI systems that run in production - and now I walk it again with every student, one session at a time. This document is that path, planned to the session.

- **Prabhanjan · Founder, Praksh Academy**

One journey · four stages · three careers

Meet **Praksh the Trailblazer** - a developer who already codes and wants to blaze the fastest credible path into the data world. No hand-holding, no filler: 5 sessions a week for 6 focused weeks, every session dense with exactly the skills hiring managers test for - plus the same assignments, capstones and career support as the full journey.

● 30 one-on-one sessions

● 5 sessions / week · ≈ 6 weeks

● 28 bonus doubt sessions

● 4 capstones · certificates at every milestone

1

THE FOUNDATION**Stage 1 · Python Core**

10 sessions · 5 modules

Ready to write automation scripts, solve real problems in code, and enter any data track.

► **Milestone: Core Python Programmer**

2

TRACK · DATA ANALYST**Stage 2 · Data Analysis**

7 sessions · 3 modules

Clean, analyse and visualise business data; build reports and dashboards.

► **Unlocks: Data Analyst**

3

TRACK · DATA ENGINEER**Stage 3 · Cloud & Data Engineering**

6 sessions · 3 modules

Design and automate cloud data pipelines on AWS that move millions of records.

► **Unlocks: Data Engineer**

4

TRACK · DATA SCIENTIST**Stage 4 · AI & Machine Learning**

7 sessions · 3 modules

Build, evaluate and deploy predictive models and GenAI-powered applications.

► **Unlocks: Data Scientist / AI-ML Engineer**

Stage 1 · Python Core

10 sessions in this stage

Week one is a controlled burn through Python - rapid-fire drills that convert "I can code" into idiomatic, interview-clean Python, with OOP patterns that reappear throughout the sprint.

**MODULE 01****Programming Foundations**

2 sessions

- ✓ Python setup, IDEs & first program
- ✓ Syntax, variables & data types
- ✓ Typecasting & operators
- ✓ Input / output
- ✓ String mastery & formatting

MODULE 02**Control Flow**

2 sessions

- ✓ if · elif · else decisions
- ✓ while & for loops
- ✓ Nested loops & patterns
- ✓ break, continue, pass
- ✓ Comprehensions

MODULE 03**Data Structures**

2 sessions

- ✓ Lists & tuples
- ✓ Sets & dictionaries
- ✓ Nested structures
- ✓ Built-in methods & tricks
- ✓ Choosing the right structure

MODULE 04**Functions & Modules**

2 sessions

- ✓ Defining functions & arguments
- ✓ Return values & scope
- ✓ Lambda, map, filter
- ✓ Recursion
- ✓ Modules, packages, pip & venv

MODULE 05**Object-Oriented Python**

2 sessions

- ✓ Classes & objects
- ✓ Constructors & attributes
- ✓ Inheritance & polymorphism
- ✓ Encapsulation & magic methods
- ✓ Mini OOP project

MILESTONE ACHIEVED**Core Python Programmer**

Ready to write automation scripts, solve real problems in code, and enter any data track.

Includes 2 live doubt-assistance sessions per module and a parent-teacher progress meet at every module completion.

Stage 2 · Data Analysis

7 sessions in this stage

Then straight into the analyst's toolkit at full speed: SQL that answers real business questions, Pandas pipelines, and visualisations that land the point in one glance. **Data Analyst** skills - checked.



MODULE 06

Files, Databases & SQL

2 sessions

- ✓ File handling (txt / CSV / JSON / Excel)
- ✓ Exception handling
- ✓ SQL essentials for analysts
- ✓ MySQL & SQLite connectivity with Python
- ✓ Working with REST APIs

MODULE 07

NumPy & Pandas

3 sessions

- ✓ NumPy arrays & vectorisation
- ✓ Series & DataFrames
- ✓ Data cleaning & missing values
- ✓ GroupBy, joins & reshaping
- ✓ Time-series basics

MODULE 08

Visualization & EDA

2 sessions

- ✓ Matplotlib & Seaborn
- ✓ Interactive charts with Plotly
- ✓ BI dashboards (Power BI intro)
- ✓ The EDA workflow
- ✓ Capstone: real-dataset analysis

CAREER UNLOCKED AT THIS MILESTONE



Data Analyst

Clean, analyse and visualise business data; build reports and dashboards.

Entry-level range*

₹4-8 LPA (India) · \$55-75K (global)

Includes 2 live doubt-assistance sessions per module and a parent-teacher progress meet at every module completion. *Indicative entry-level ranges; vary by city, company and skill depth.

Stage 3 · Cloud & Data Engineering

6 sessions in this stage

The trail turns upward into the cloud: S3, Lambda, boto3, Airflow and PySpark in tight, hands-on sessions built around one production-style pipeline. **Data Engineer** skills - checked.

MODULE 09**Cloud & AWS with Python**

2 sessions

- ✓ Cloud fundamentals & IAM
- ✓ S3 & EC2 hands-on
- ✓ AWS Lambda (serverless)
- ✓ Automating AWS with boto3
- ✓ Cost-safe free-tier practice

MODULE 10**ETL & Data Pipelines**

2 sessions

- ✓ ETL vs ELT design
- ✓ Apache Airflow orchestration
- ✓ PySpark essentials
- ✓ AWS Glue & Athena
- ✓ Data quality, logging & alerts

MODULE 11**Warehousing & DE Capstone**

2 sessions

- ✓ Data-warehouse concepts
- ✓ Amazon Redshift basics
- ✓ Batch vs streaming overview
- ✓ Capstone: end-to-end cloud pipeline

CAREER UNLOCKED AT THIS MILESTONE**Data Engineer**

Design and automate cloud data pipelines on AWS that move millions of records.

Entry-level range*

₹6-14 LPA (India) · \$80-110K (global)

Includes 2 live doubt-assistance sessions per module and a parent-teacher progress meet at every module completion. *Indicative entry-level ranges; vary by city, company and skill depth.

Stage 4 · AI & Machine Learning

7 sessions in this stage

The final ascent: machine learning and GenAI, compressed but complete - model building, evaluation, LLM APIs and a capstone that becomes the centrepiece of the portfolio. **Data Scientist** - summit reached. “

MODULE 12 Statistics & Math for ML

2 sessions

- ✓ Descriptive statistics
- ✓ Probability & distributions
- ✓ Hypothesis testing
- ✓ Correlation & feature relationships

MODULE 13 Machine Learning

3 sessions

- ✓ Regression & classification
- ✓ Model evaluation & tuning
- ✓ Unsupervised learning
- ✓ Feature engineering
- ✓ scikit-learn projects

MODULE 14 Deep Learning & GenAI

2 sessions

- ✓ Neural-network foundations
- ✓ TensorFlow / Keras intro
- ✓ GenAI & LLM APIs
- ✓ Prompt engineering
- ✓ Capstone: end-to-end DS project

CAREER UNLOCKED AT THIS MILESTONE



Data Scientist / AI-ML Engineer

Build, evaluate and deploy predictive models and GenAI-powered applications.

Entry-level range*

₹8-15 LPA (India) · \$95-130K (global)

Includes 2 live doubt-assistance sessions per module and a parent-teacher progress meet at every module completion. *Indicative entry-level ranges; vary by city, company and skill depth.

The career ladder, stage by stage

Every stage of the roadmap ends at a real, hireable milestone. Trailblazers don't have to wait until the very end - job eligibility begins the moment Stage 2 is complete, and each further stage raises both the role and the pay ceiling.

Milestone	You become	Skills gained	Roles you can apply for	Entry range*
Stage 1 complete	Core Python Programmer	Python · OOP · problem solving · automation scripts	Internships · automation & scripting work · strong base for any tech career	-
Stage 2 complete	Data Analyst	SQL · Pandas · NumPy · visualisation · EDA · dashboards	Data Analyst · Business Analyst · MIS / Reporting Analyst	₹4-8 LPA · \$55-75K
Stage 3 complete	Data Engineer	AWS · boto3 · Airflow · PySpark · ETL · warehousing	Data Engineer · Cloud Data Engineer · ETL Developer	₹6-14 LPA · \$80-110K
Stage 4 complete	Data Scientist / AI-ML Engineer	Statistics · scikit-learn · deep learning · GenAI & LLM APIs	Data Scientist · ML Engineer · AI Engineer	₹8-15 LPA · \$95-130K

*Indicative entry-level ranges (India LPA · global USD); actual offers vary by city, company, portfolio strength and interview performance.



Module Certificates
Awarded after each module's assessment is cleared



Track Certificates
Analyst · Engineer · Scientist milestone certificates



GitHub Portfolio
Capstone projects published where recruiters actually look



Interview Readiness
Mock interviews & role-wise question banks per track

A roadmap is only as good as the doors it opens. This one opens three - and every door is backed by a certificate, a capstone and interview preparation.

What you get with this course

This is not a video library - it is a fully mentored, one-on-one program. Every element below is included for every student, on every path.

1 One-on-One Live Classes

Every 1-hour session = 20 min of focused teaching + 40 min of guided hands-on practice. The student codes, not just watches.

2 Recorded Sessions

Every class is recorded and available to rewatch anytime - revision on demand.

3 Assignments After Every Session

A practice assignment follows each session, reviewed with personalised feedback.

4 Study Materials

Curated notes, cheat-sheets and reference material delivered for every session.

5 Live Doubt-Assistance Sessions

Two dedicated doubt-clearing sessions per module - 28 bonus sessions across the journey, at no extra cost.

6 Praksh Academy Account

A dedicated praksh-academy domain account where all recordings, materials and progress live in one place.

7 Parent-Teacher Meet

A progress review after every module, backed by assessment scorecards - parents always know exactly where the student stands.

8 Module Assessments

A quiz + practical test at the end of every module, so progress is measured, not assumed.

9 Capstone Projects

One real-world project per track, published to a GitHub portfolio recruiters can see.

10 Certificates

A certificate for every module completed, plus track-completion certificates for Analyst, Engineer and Scientist milestones.

11 Career Support

Resume building, LinkedIn optimisation, mock interviews and role-wise interview question banks.

12 Free Demo Class

Experience the teaching style before enrolling - book a free demo class, on the house.

BEFORE YOU BEGIN

Prerequisites - refreshingly short

- ✓ A laptop or desktop (8 GB RAM recommended) with a stable internet connection
- ✓ No paid software ever - Python, VS Code, Jupyter, MySQL and the AWS Free Tier are all free
- ✓ A Google account for classes, materials and your praksh-academy domain account
- ✓ Basic familiarity with any programming language - the level assessment confirms your fit

GETTING STARTED

Four steps from curious to coding

1

Book a free demo

Pick a slot that suits you - meet the mentor, see the teaching style live.

2

Level assessment

A friendly evaluation decides the right path: Explorer, Builder or Trailblazer.

3

Personal schedule

Your weekly plan is drawn up - 5 sessions/week on days that fit your routine.

4

Begin the journey

Session 1 starts - and every session after it is tracked, recorded and measured.

Every great journey in this document begins with the same small step - a single free demo class. That's where Praksh the Trailblazer met the mentor, saw the map, and decided to walk it.



Book Your Free Demo Class - It's On Us

[Click here to pick your slot](#) · no payment · no commitment · just a great first class

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