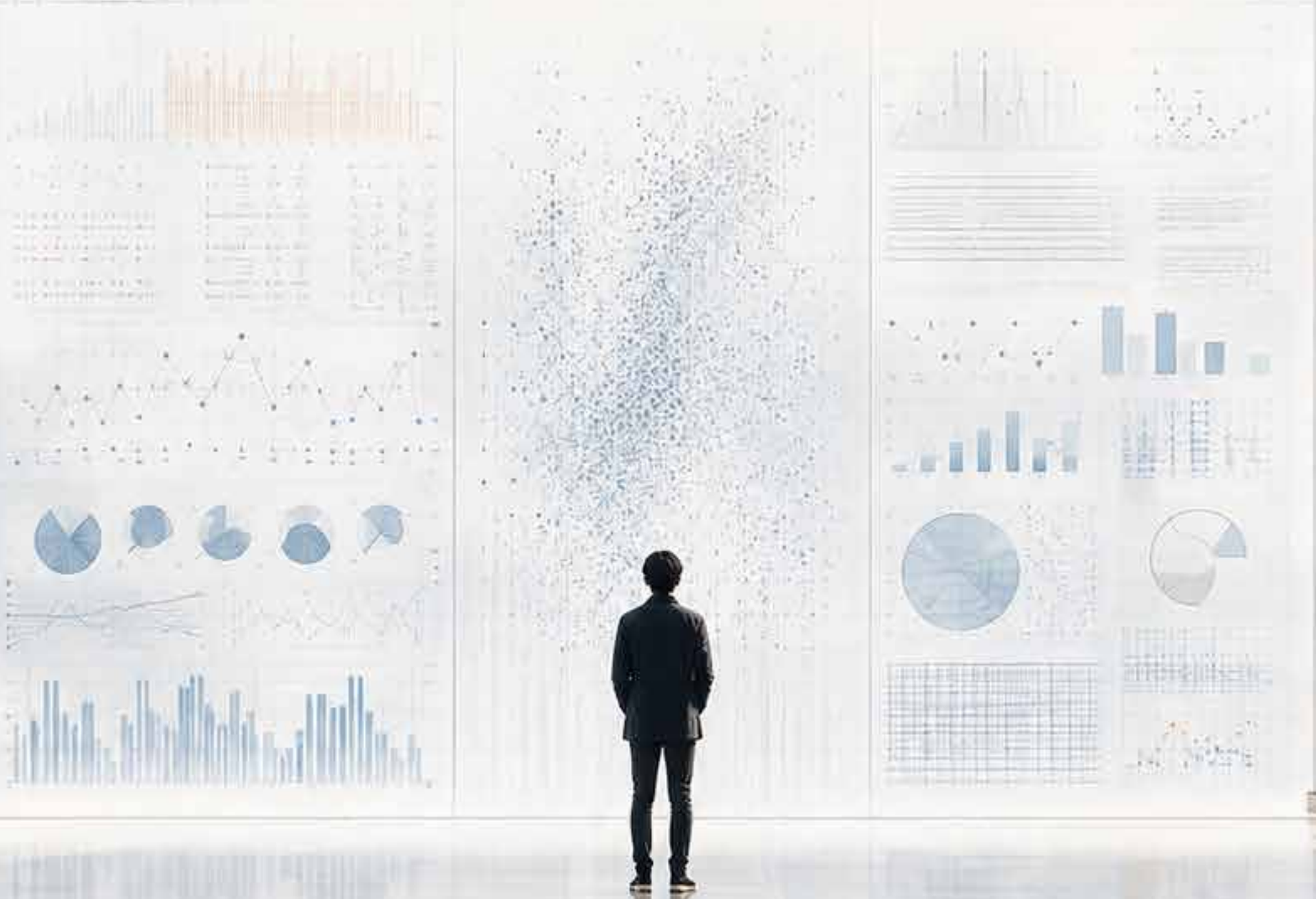
STUDY IQ

IBM

nasscom Certified

DATA SCIENCE & MACHINE LEARNING WITH GENAI

Build Models. Ship Decisions. Scale With GenAI.



Powered by IBM

INDIA'S MOST FUTURE-READY

DATA SCIENCE COURSE WITH GENAI

A comprehensive Data Science and Machine Learning program designed to build strong foundations in Python, SQL, Statistics, Machine Learning, Deep Learning, NLP and Computer Vision—with a dedicated GenAI track for real-world applications.

PROGRAM AT A GLANCE

280+ Hours
of Live Virtual Training

7 Months
of Structured Learning

8 Mini Projects

1 Capstone Project

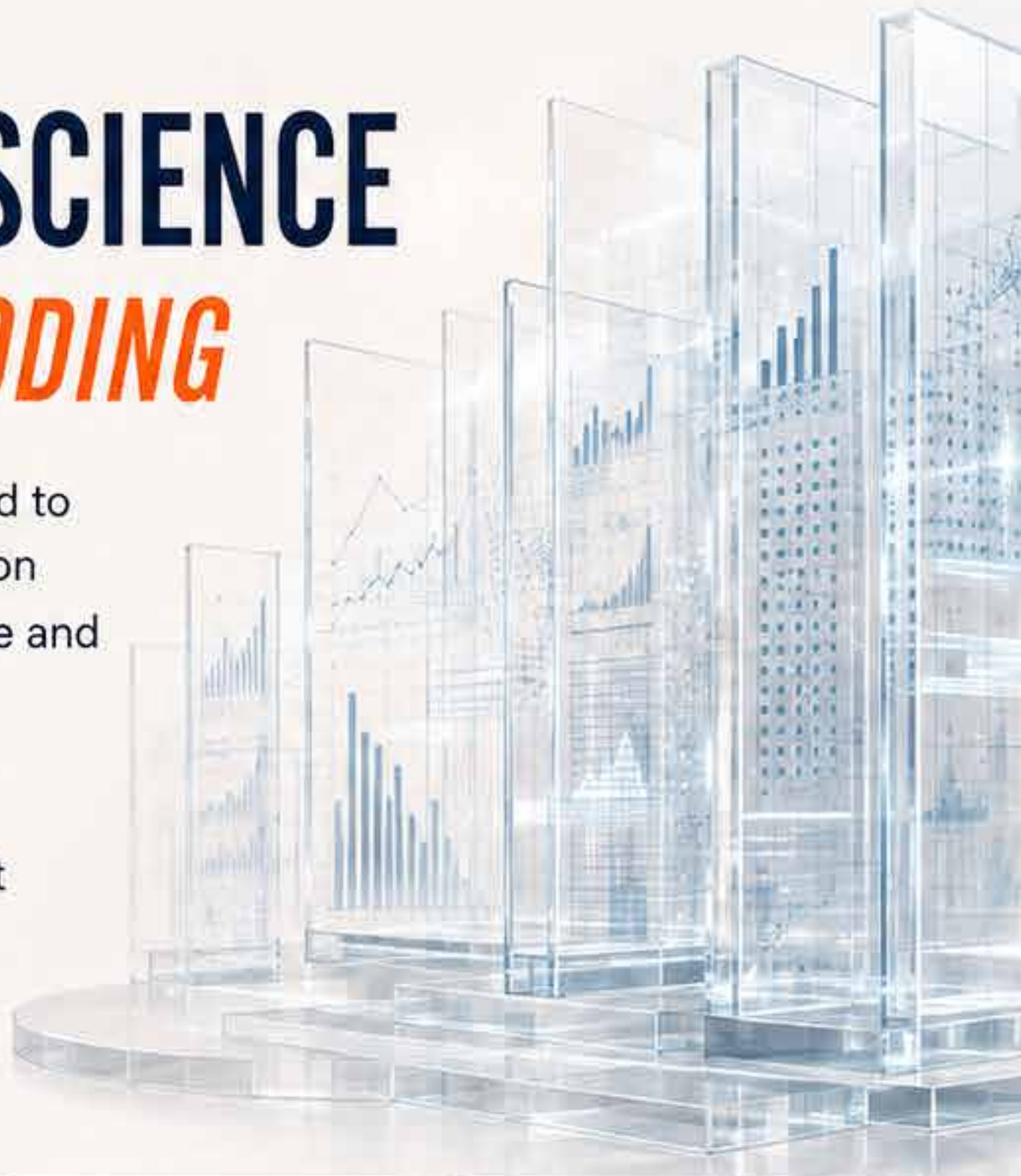
15+ Case Studies

Live Instructor-Led
Virtual Sessions

PROGRAM CREDENTIALS

- IBM-endorsed learning experience
- NASSCOM Certified
- NASSCOM endorsed course
- NAAC A+, UGC Entitled

INDIA'S AI & DATA SCIENCE
LANDSCAPE IS EXPLODING



India's Data Science and AI industry is expected to surpass $22 billion by 2026, with GenAI adoption transforming roles across sectors—from finance and healthcare to e-commerce and logistics.

This growth is also creating strong career opportunities in Tier 2 and Tier 3 cities, making it a high-demand and future-ready field.

MARKET INDICATORS

$21B by 2030
India's Data Analytics Market
Grand View Research India Data Analytics Outlook 2024–2030

36% Increase
in Data Science Jobs by 2031
U.S. Bureau of Labor Statistics

45% YoY Growth
in demand for AI-augmented data professionals
Govt. of India/MeitY Report

61% YoY Rise
in GenAI-related roles
People Matters India Report 2025

1.1 MILLION
New job openings expected in Data Science and AI by 2026
Government/MeitY Report

DATA SCIENTIST SKILLS

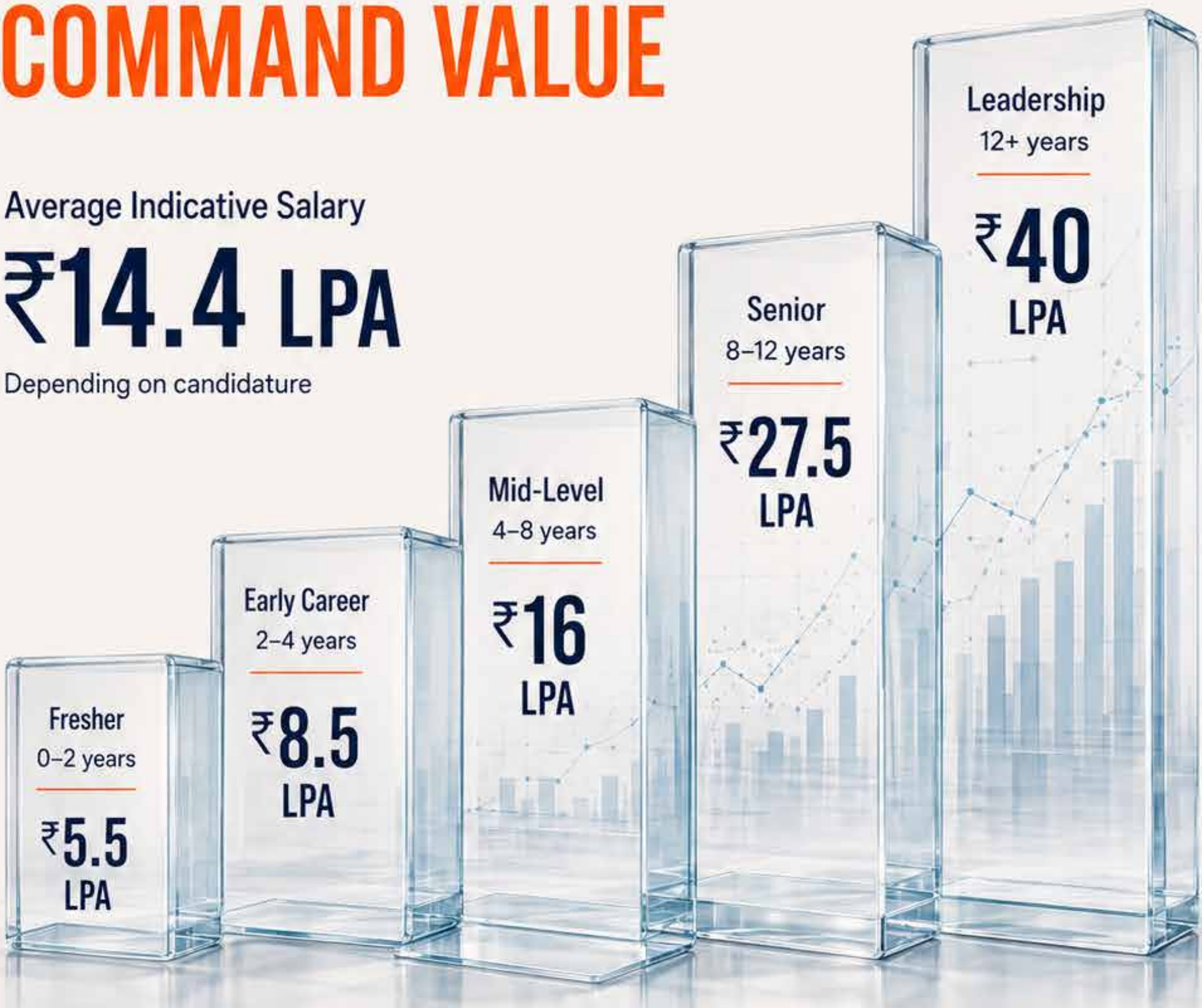
- Teamwork
- Advanced Statistics
- High-Level Mathematics
- Social Media Mining
- SQL
- Natural Language Processing
- Machine Learning
- Communication
- Business Understanding
- Microsoft Excel
- Data Visualisation
- Python

BUILD SKILLS THAT COMMAND VALUE

Average Indicative Salary

₹14.4 LPA

Depending on candidature



Source: Glassdoor India, 2025

LOCATION PREMIUM

Salaries in metro cities such as Bangalore and Mumbai can be 15–30% higher.

SPECIALISATION PREMIUM

Professionals with expertise in Generative AI and Large Language Models can command salaries 20–40% higher, especially in R&D, product development and consulting roles.

STARTUP COMPENSATION

Emerging startups may offer equity or performance-linked bonuses in addition to base salaries.

YOUR DATA SCIENCE CAREER PATH

01
0–2 years
Junior
Data Scientist

02
2–4 years
Data
Scientist

03
4–7 years
Senior
Data Scientist

04
7–10 years
Lead
Data Scientist

05
10–15 years
Principal
Data Scientist

06
15+ years
Chief
Data Officer

JOB ROLES IN DATA SCIENCE

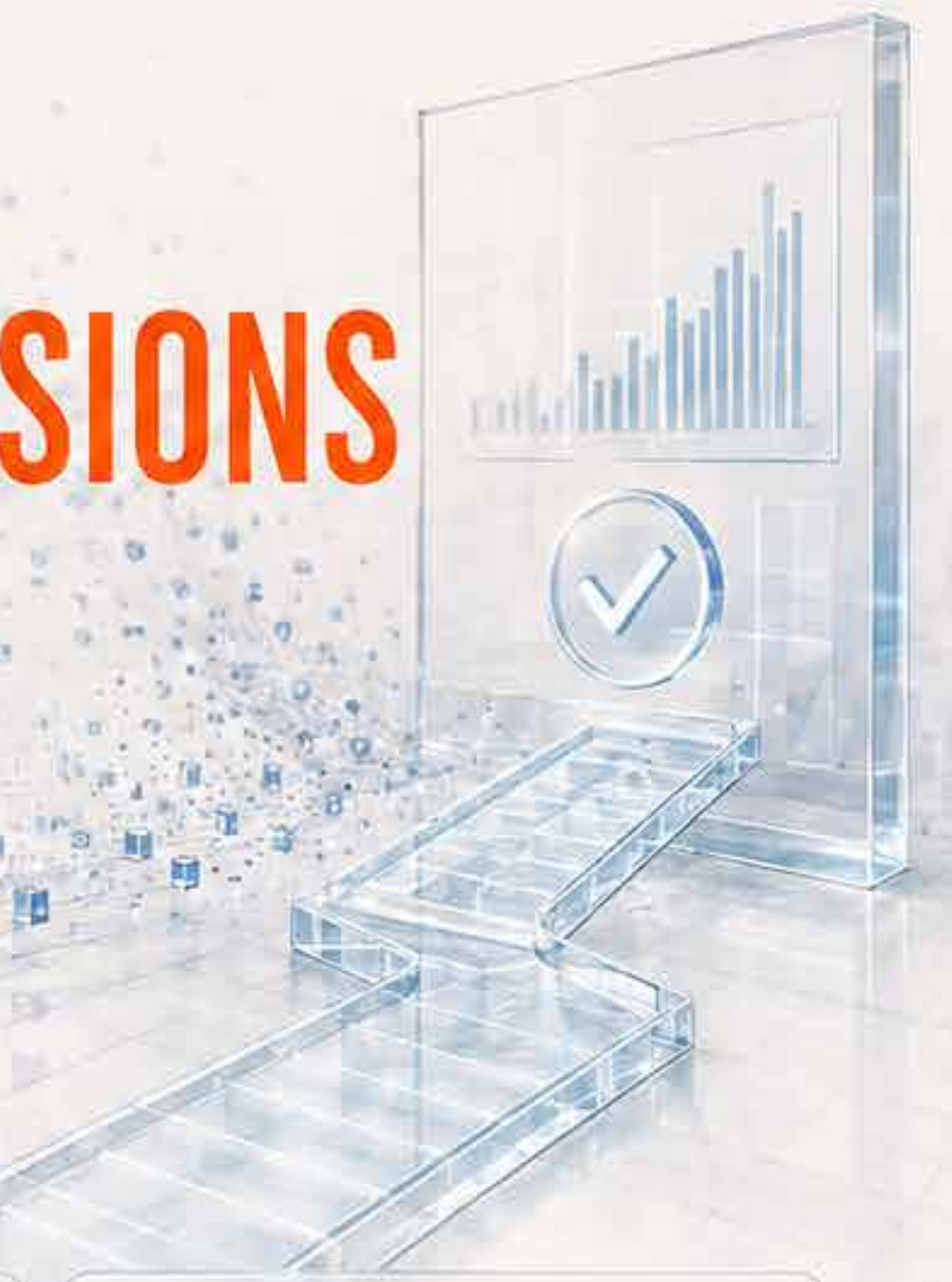
CORE DATA SCIENCE & ML ROLES

- Data Scientist
- Data Analyst Intern
- AI/ML Research Engineer
- Data Analyst/Business Analyst
- Data Engineer – Trainee
- Data Science Associate/Analyst

GENAI-FOCUSED & EMERGING ROLES

- Generative AI Specialist/Engineer
- Prompt Engineer
- NLP Engineer/LLM Developer
- Computer Vision Engineer
- Deep Learning Specialist
- AI Workflow Integration Analyst

FROM RAW DATA TO INTELLIGENT DECISIONS



The program is designed and delivered through industry collaboration with IBM experts and PwC Academy, giving learners access to academic guidance, practical training, industry projects, masterclasses and career support.

DESIGN AND EVALUATE ML MODELS

Apply supervised and unsupervised learning algorithms using Python, scikit-learn and TensorFlow to solve classification, regression and clustering problems.

PERFORM ADVANCED DATA ANALYSIS

Clean, analyse and visualise structured and unstructured datasets using Pandas, NumPy, Matplotlib and Seaborn to derive business insights.

BUILD INTELLIGENT AI SYSTEMS

Apply neural-network architectures to image understanding, text analytics and pattern recognition, with an emphasis on real-world implementation and model evaluation.

LEVERAGE GENERATIVE AI

Use GenAI tools and LLMs for prompt design, insight generation, workflow automation and productivity enhancement.

BUILD A JOB-READY PORTFOLIO

Demonstrate practical expertise through domain-based projects, assessments, case studies and a final capstone.

INDUSTRY-READINESS
IN COLLABORATION WITH IBM

The program combines IBM's curriculum, guided labs and certification pathways with structured academic delivery to help learners become industry-ready.

LEARNERS WILL BENEFIT FROM

- Program inputs from IBM experts
- Access to IBM Guided Labs and GenAI tools
- 12 IBM Masterclasses by industry experts
- Hackathons and innovation challenges
- Quarterly IBM Campus Immersions for top performers
- IBM learning and certification experience

IBM-DESIGNED COURSES

NoSQL Databases	18 Hours
PyTorch Fundamentals for Machine Learning	17 Hours
Generative AI for Data Scientists	11 Hours

40+ HOURS OF IBM-DESIGNED LEARNING

LEARN. PRACTISE. BUILD.
FROM ANYWHERE.

24/7 LEARNING ACCESS

- Anytime access to class recordings
- Toolkits and assignments
- GenAI guided labs
- Coding challenges
- Self-paced learning content
- Learning community access
- Interaction with mentors and peers

INDUSTRY-LEADING TOOLS YOU WILL MASTER

- Jupyter
- Python
- NumPy
- pandas
- SQLite
- TensorFlow
- GitHub Copilot
- ChatGPT
- OpenAI
- Matplotlib
- Claude
- Perplexity
- scikit-learn

INDUSTRY-FIRST CURRICULUM

MODULE 1 PYTHON PROGRAMMING FOR DIAIA SCIENCE — 41 Hours

- Python syntax, data types and control structures
- Functions, file handling and exception handling
- Reusable coding practices
- NumPy for numerical operations
- Pandas for data manipulation and analysis
- Data visualisation using Matplotlib
- Writing reusable and structured Python code

Mini Project: Exploratory Data Analysis on a real dataset

MODULE 2 SQL FOR DATA SCIENCE — 12.5 Hours

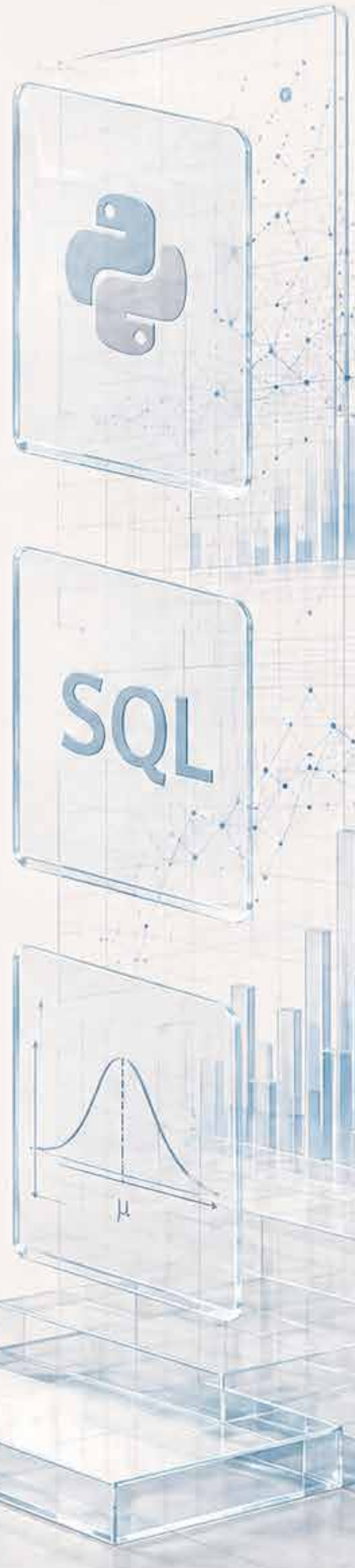
- Fundamentals of relational databases and SQL querying
- Creating, updating and querying tables
- Filtering, joins, subqueries and aggregations
- Data cleaning and transformation using SQL
- Analytical SQL concepts, including window functions
- Integrating SQL with Python for data-analysis workflows
- Applying analytical SQL techniques for real-world analysis and reporting

Mini Project: Analyse a retail-store database and derive insights related to sales, customers and transactions.

MODULE 3 STATISTICS & PROBABILITY — 23 Hours

- Mean, median, mode and variance
- Normal, binomial and Poisson distributions
- Sampling concepts and Central Limit Theorem
- Correlation and covariance
- Hypothesis testing
- Null and alternative hypotheses
- P-values and confidence intervals
- Statistical analysis and visualisation using Python

Mini Project: Customer Insights Statistical Investigation



MACHINE LEARNING
FROM FOUNDATIONS TO LLMS

MODULE 4
SUPERVISED LEARNING
46.5 Hours

- Linear and Logistic Regression
- Decision Trees and Random Forests
- KNN and Hyperparameter Tuning
- Model Performance Metrics
- Cross-Validation and Model Evaluation
- Model selection using cross-validation
- End-to-end supervised-learning case studies

Mini Project:
Property Price Prediction

MODULE 5
UNSUPERVISED LEARNING
17 Hours

- K-means and Hierarchical Clustering
- Dimensionality Reduction using PCA
- Anomaly Detection
- Business Segmentation Use Cases

Mini Project:
Customer Segmentation using K-means

MODULE 6
NEURAL NETWORKS & DEEP LEARNING
19.5 Hours

- Perceptron to MLP
- Activation and Loss Functions
- Backpropagation and Gradient Descent
- TensorFlow/Keras
- Image Data and Convolutions
- CNN for Image Classification

Mini Project:
Cats vs Dogs Classifier

MODULE 7
NATURAL LANGUAGE PROCESSING & LLMS
23 Hours

- Text Preprocessing and Vectorisation
- Word2Vec and GloVe
- RNNs and LSTMs
- Transformer Architecture
- BERT/GPT for Sentiment Analysis

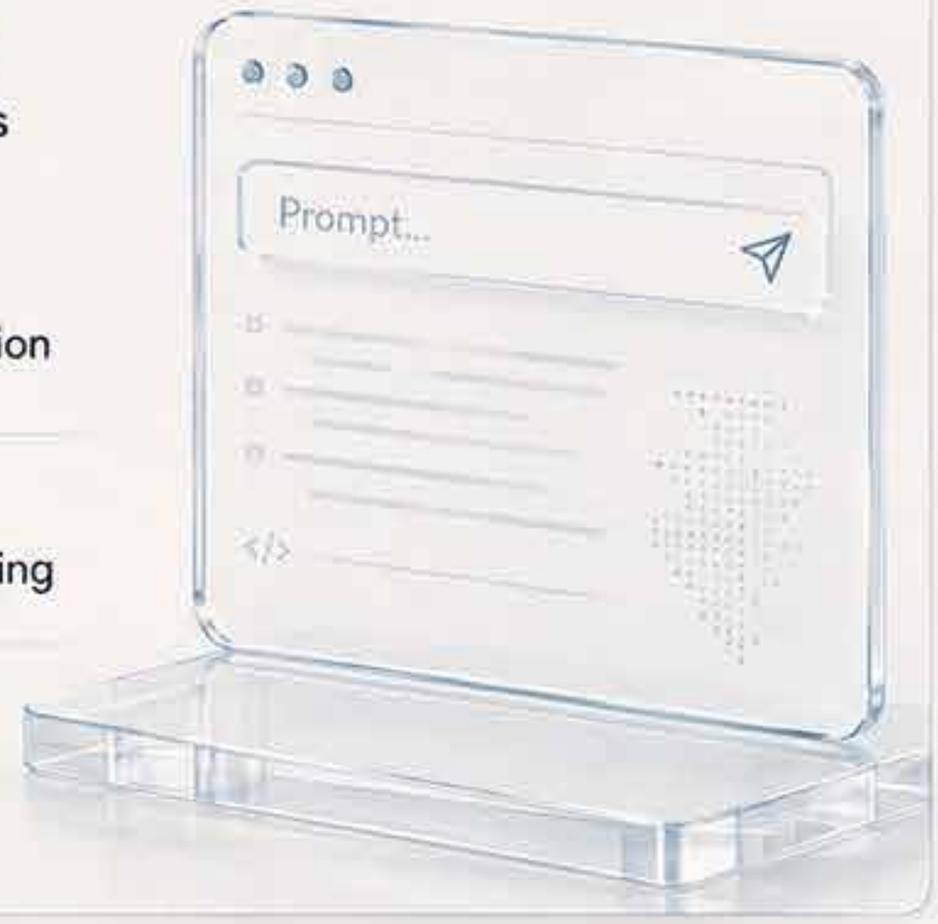
Mini Project:
IMDB Reviews Classifier

MODULE 8

GENERATIVE AI & PROMPT ENGINEERING

42 Hours

- GenAI for Code Enhancement
- GenAI for SQL Enhancement
- GenAI for Statistical Analysis
- GenAI for Model Building
- GenAI for Classification
- GenAI for Unsupervised Learning
- GenAI for NLP Applications



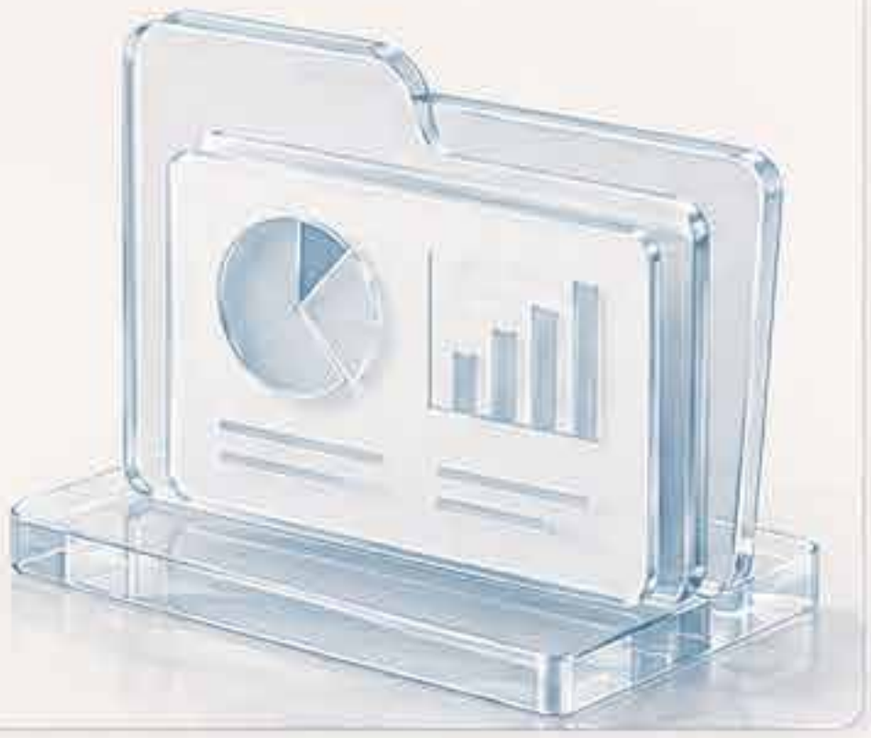
MODULE 9

CAPSTONE PROJECT

Powered by IBM

Capstone options are provided across e-commerce, financial fraud, customer retention and NLP-based recruitment.

- E-Commerce
- Fraud Detection
- Customer Retention
- NLP Recruitment

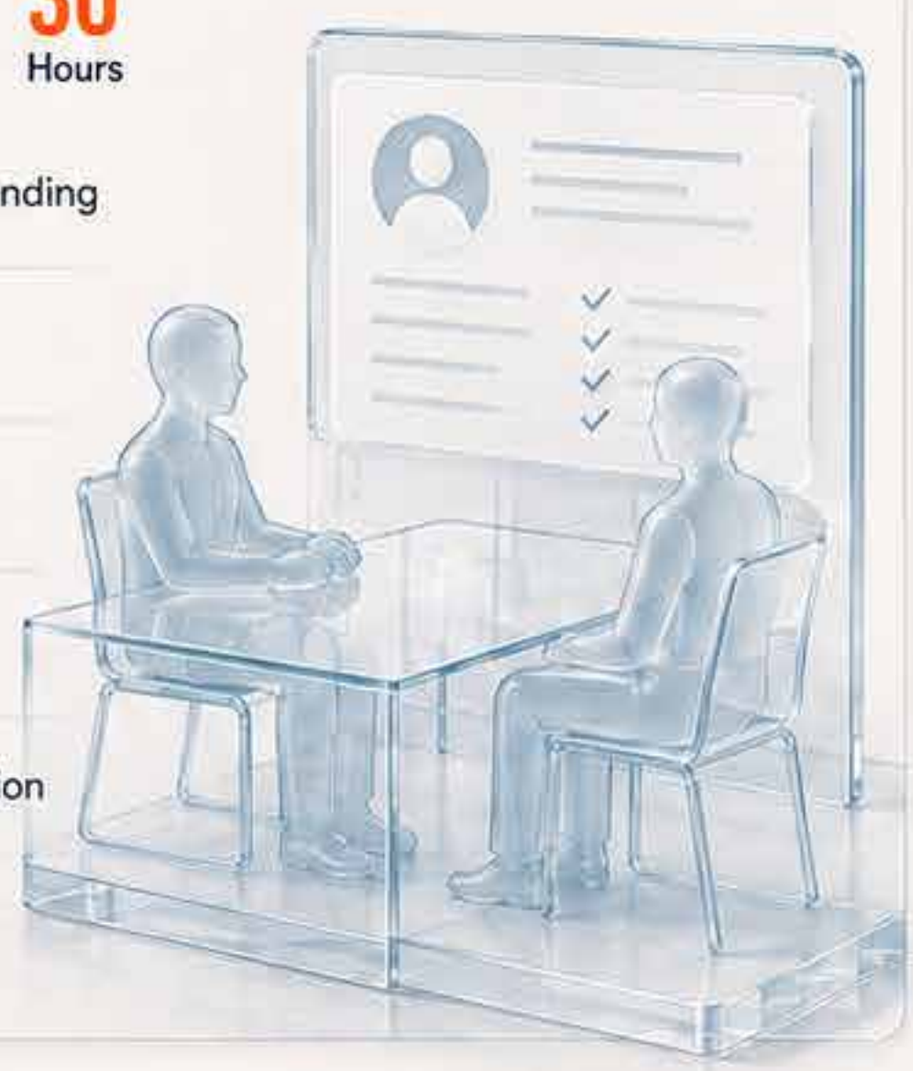


MODULE 10

JOB READINESS PREPARATION

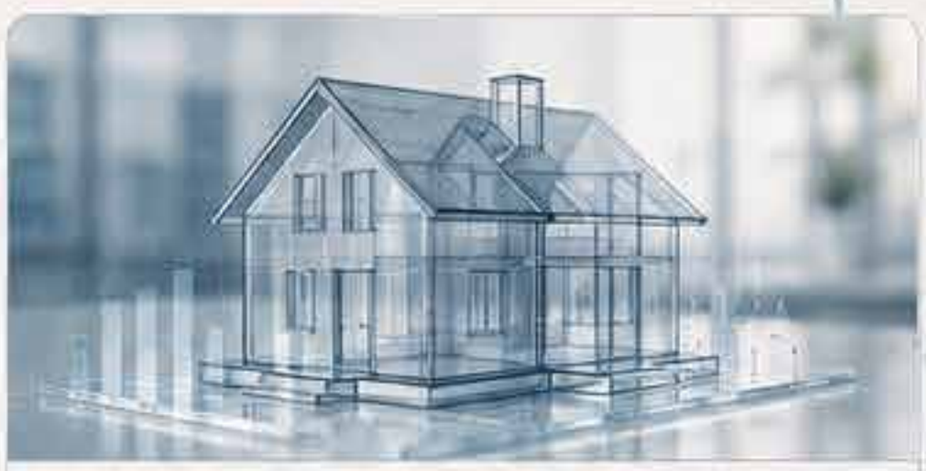
30 Hours

- Workplace Communication and English Confidence
- Written Communication and Online Presence
- Data Storytelling, Logical Reasoning and Stakeholder Knowledge
- Teamwork, Collaboration and Professional Behaviour
- Time Management and Work Ethics
- Data Responsibility
- Resume and Personal Branding
- Soft-Skills Sessions
- Mock Interviews
- Final Presentation
- LinkedIn Profile Optimisation
- Job-Search Intelligence



8 MINI PROJECTS
ACROSS MULTIPLE DOMAINS

Exploratory Data Analysis on Insurance Data

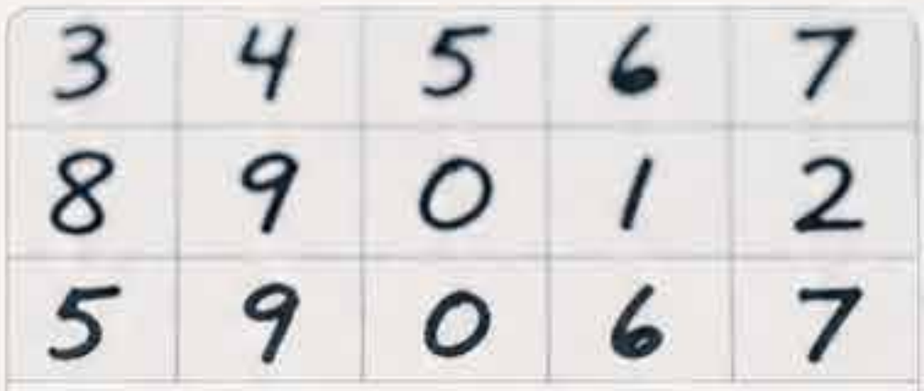


Property Price Prediction

Customer Churn Prediction

Credit Risk Prediction

Customer Segmentation



Handwritten Digit Recognition

IMDB Review Classifier

Face Recognition using OpenCV

CASE STUDIES & PROJECT-BASED LEARNING

Work on real-world datasets, assessments and 15+ case studies to develop practical, career-ready expertise.

APPLY EVERYTHING YOU'VE LEARNED

INVENTORY OPTIMISATION

Inventory Optimisation for an E-Commerce Warehouse through Demand Forecast

FRAUD DETECTION

Fraud Detection in Online Transactions

CUSTOMER RETENTION

Churn Prediction and Retention Strategy for a Telecom Provider

NLP-BASED RECRUITMENT

Resume Screening and Role Matching using NLP

PROGRAM DELIVERY

Mode
Live Instructor-Led Virtual Sessions

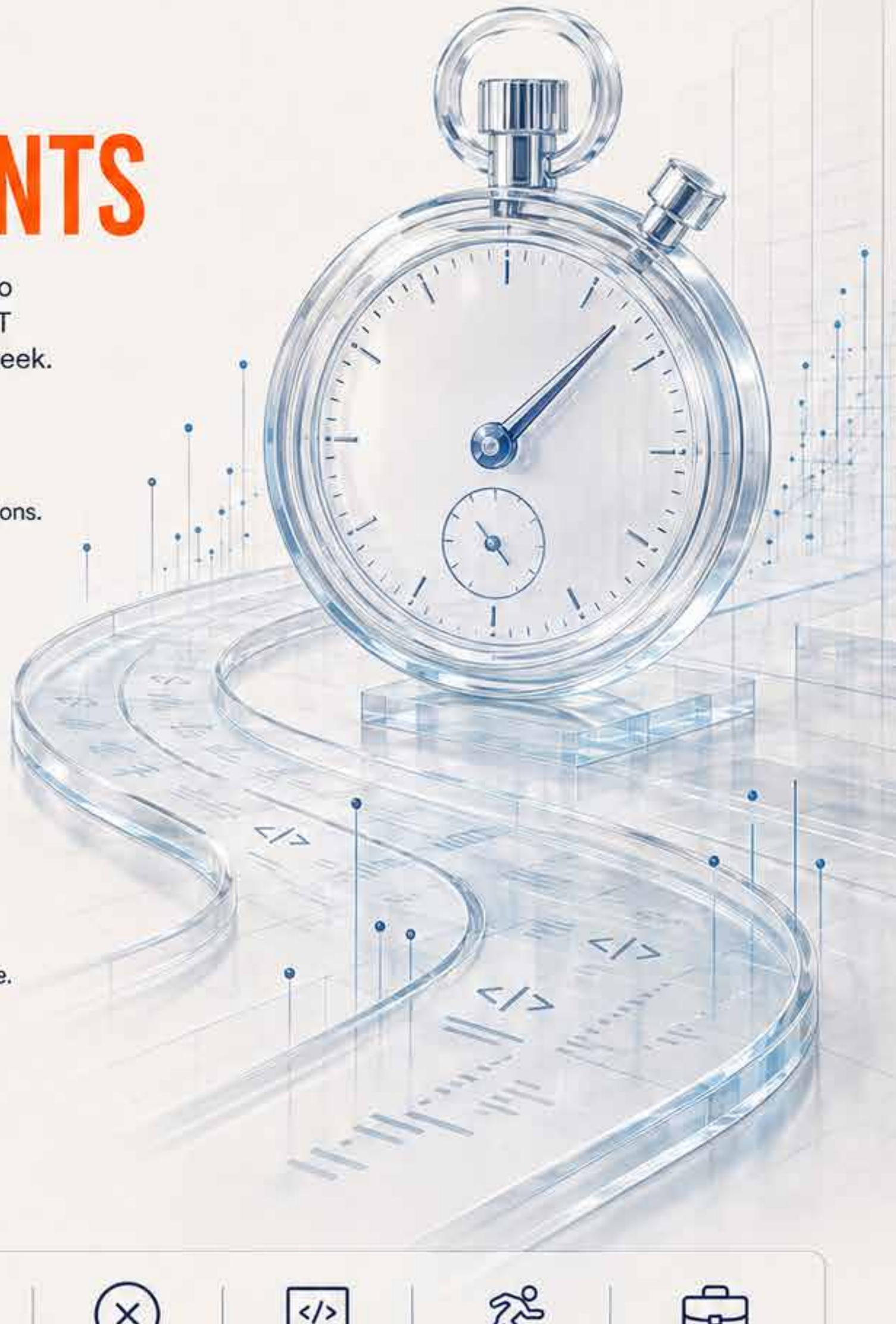
Duration
7 Months

Class Schedule
Saturday and Sunday: 7:30 PM–10:30 PM
Wednesday: 7:00 PM–10:00 PM

Platform
Zoom

F.O.C.U.S
CODING SPRINTS

A high-impact coding program designed to sharpen technical skills and simulate real IT sprint experiences—in just a few hours a week.



FASTTRACK
Accelerate your learning journey through focused weekly live sessions.

OPTIMIZE
Learn to write clean, efficient and scalable code.

CODE
Apply concepts through live coding labs with faculty.

UPSKILL
Build job-ready capabilities through project work and practice.

SPRINT
Simulate real IT sprints and solve business-style challenges.

PRACTICAL FORMAT

Weekly Coding Challenges	25 Hours	100% Practical	0% Theory	Live Coding Labs	Sprint Simulations	Real-world Project Scenarios

BENEFITS

- Build confidence through hands-on practice
- Strengthen problem-solving and teamwork
- Boost your profile for placements and internships
- Scholarships for the Top 3 performers

LEARNING BY DOING

THE COMPLETE LEARNER JOURNEY

The program combines live lectures by senior industry experts with practical learning through real-world case studies, projects and discussions.

1 | SELF-LEARNING VIDEOS
Build familiarity with fundamental concepts before attending live sessions.

2 | LIVE VIRTUAL TRAINING
Engage directly with Data Science trainers through interactive sessions.

3 | QUIZZES & KNOWLEDGE CHECKS
Reinforce concepts through assessments across core modules.

4 | FOCUS SPRINTS
Participate in live, hands-on coding sprints.

5 | IBM ENTERPRISE LEARNING EXPERIENCE
Work with IBM-designed courses, guided labs and GenAI tools.

6 | MINI PROJECTS
Complete at-home projects at the end of relevant modules.

7 | IBM MASTERCLASSES
Learn about emerging industry trends from IBM experts.

8 | CAREER PREPARATION
Build your resume, LinkedIn profile, aptitude and soft skills.

9 | CAPSTONE & CERTIFICATION
Complete a capstone project with personalised feedback.

GETTING YOU JOB READY

The Career Assistance team provides 100% Career Assistance to support learners in preparing for employment opportunities.

RESUME BUILDING

Refining and polishing the learner's resume with industry-focused inputs.

INTERVIEW PREPARATION

Preparation for HR and technical interview rounds with model questions and answers.

MOCK INTERVIEWS

1:1 and panel mock interviews with industry veterans.

COMPANY TEST PREP LIBRARY

Access to company-specific assessments wherever applicable.

CAREER MENTORSHIP

- Personalised project feedback
- Career guidance
- Resume-building support
- Interview practice and feedback
- LinkedIn profile optimisation
- Job-search intelligence

TOP HIRING COMPANIES IN INDIA

PRODUCT-BASED

Google	Amazon	Microsoft	Meta	Adobe
NVIDIA	Flipkart	Databricks	Zoho	Razorpay

SERVICE-BASED

Accenture	TCS	Infosys	Wipro	HCLTech
Tech Mahindra	LTIMindtree	Genpact		

AI-FIRST & ANALYTICS

Fractal	Mu Sigma	Tiger Analytics	Quantiphi	BRIDGEi2i
Tredence				

ADDITIONAL HIRING COMPANIES

Concentrix	Bosch	Airtel	TATA	Jio	
Zensar	EXL	Zomato	Swiggy	Lenskart	
Meesho	PhonePe	Nykaa	upGrad	Tata 1mg	Paytm

LEARN FROM INDUSTRY EXPERTS

The faculty includes experienced professionals passionate about teaching and developing the next generation of Data Scientists.

SURAJ TIWARI

AI Engineer

- 5+ years in AI, Machine Learning, Data Science, GenAI and Big Data
- Trained learners across India and the US
- Known for structured, real-world and hands-on teaching

ARINDAM

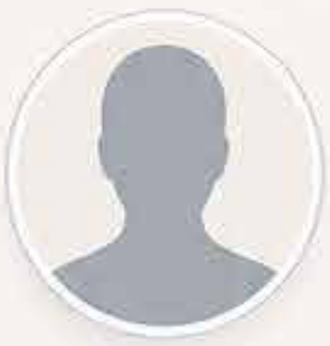
Data Science and AI Professional

- 13+ years in Data Science, Machine Learning, GenAI and Agentic AI
- Mentored 1,500+ learners over 8+ years in EdTech
- Recognised for simplified, practical and industry-ready teaching

DIPAYAN SARKAR

Data Science and AI Consultant

- 23+ years in AI, Data Science and enterprise
- Ex-Apple, Maersk Group and Hexaware
- Trained teams at Deloitte, Credit Suisse and government bodies
- Faculty at leading edtech organisations and universities across India

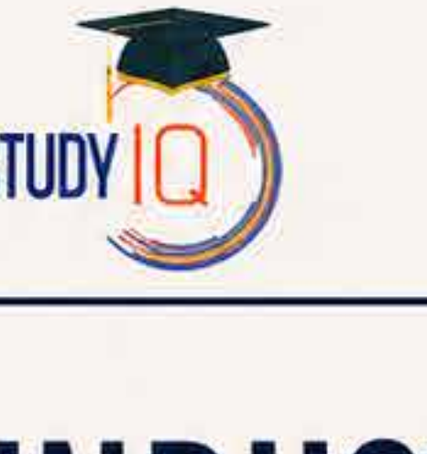


SUYASH KHARE

Senior Machine Learning Engineer & NLP Specialist

- 7+ years in ML, DL and NLP
- Mentored 5,000+ learners at upGrad
- Worked at Avalara, PeopleGrove, Compile Inc., Nineleaps and CoStrategix
- Expertise in NLP, recommender systems and AI personalisation

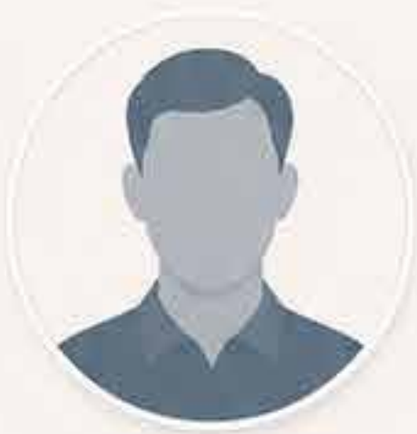
INDUSTRY FACULTY & CERTIFICATIONS



ABHISHEAK SARASWAT

Data Scientist

- 8+ years in Machine Learning, Deep Learning, GenAI and RAG/LLM engineering
- End-to-end model development and deployment expertise
- Skilled in Python, Statistics, NLP, LangChain, LlamaIndex, Ollama and CrewAI
- Working as a Senior Data Scientist (GenAI) at IBM



SHIVAM GARG

Trainer

- 7+ years across Data Science, Analytics and AI/ML
- Domain expertise in Telecom and Fintech
- Trained 1,00,000+ students through 15,000+ live sessions
- Worked with DMI Finance, Airtel X Labs and Accenture Research Labs
- Training experience with IIIT Bangalore, IIT Patna, Lovely Professional University and LJMU

SIMRAN ANAND

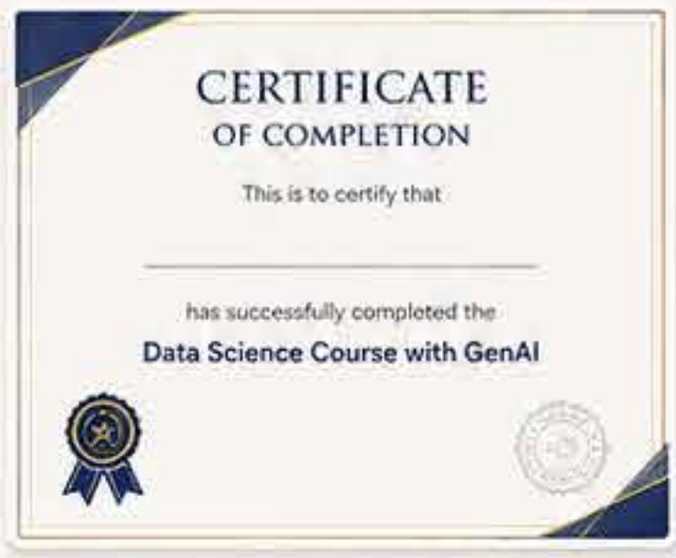
Senior Software Engineer – Machine Learning, Bosch

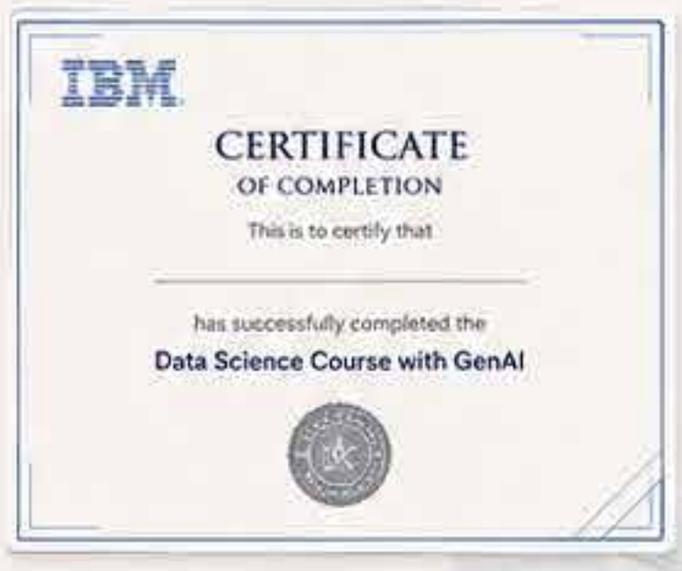
- 5+ years in Data Science, Machine Learning and Generative AI
- Trained and mentored 6,000+ learners
- Expert in NLP, LLMs, MLOps and cloud-based AI systems
- Published patents and research in Computer Vision and Deep Learning
- Known for simplifying complex AI concepts

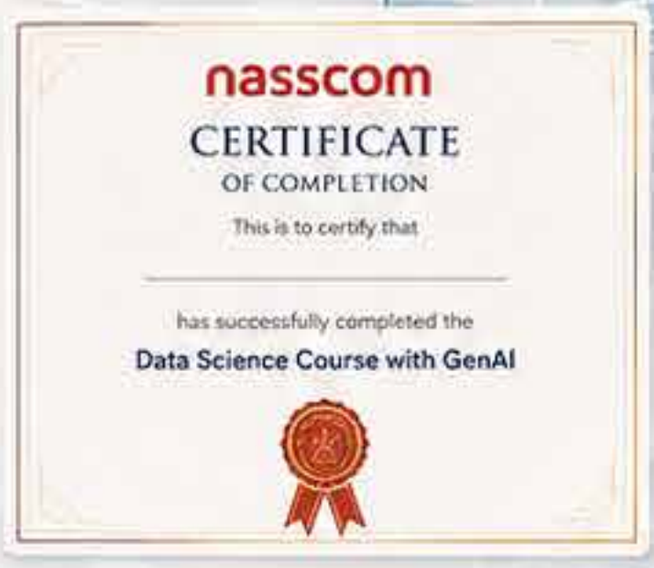
MULTIPLE CERTIFICATIONS

On successful completion, learners will receive:

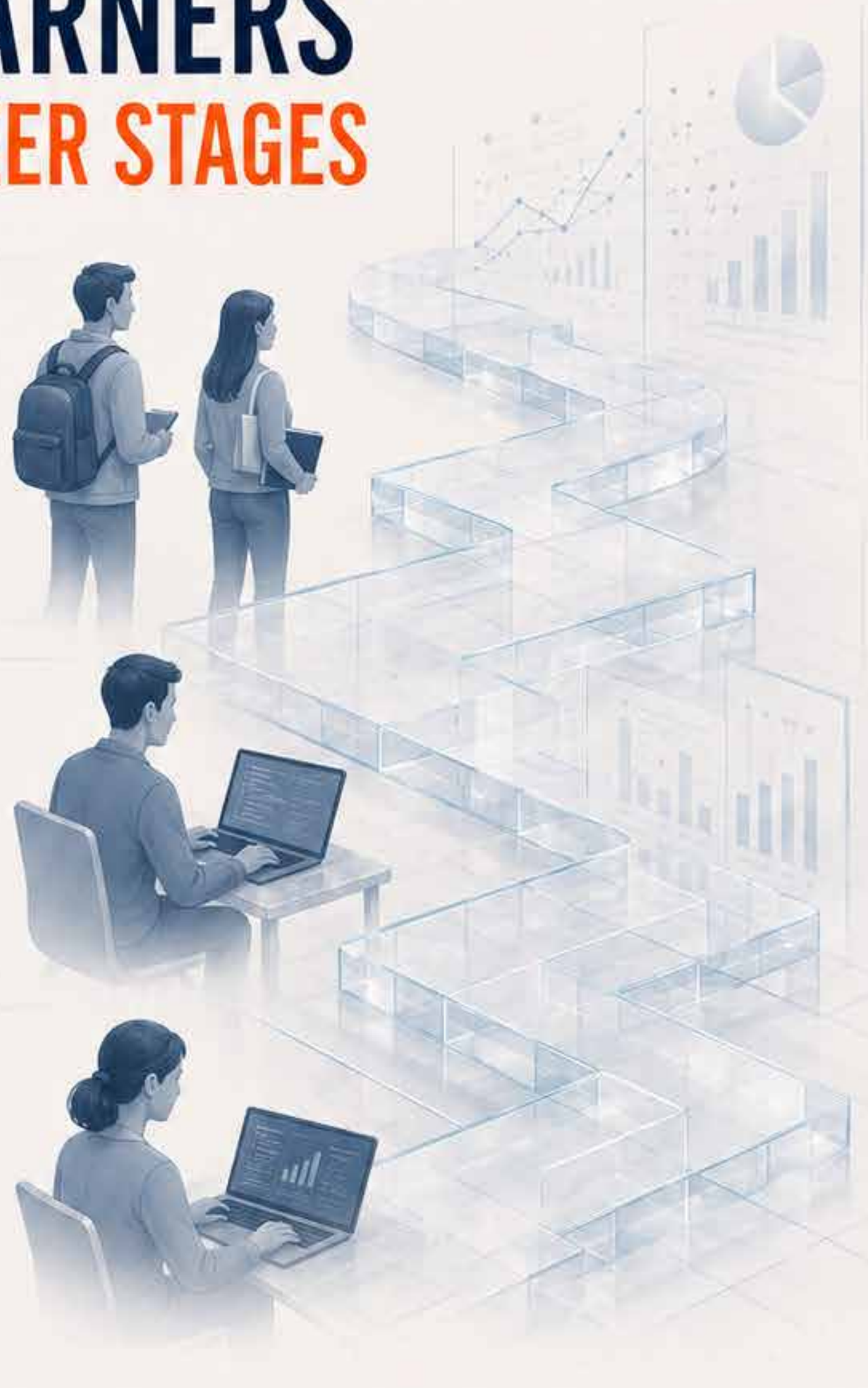
Course Completion Certificate | IBM Certificate | NASSCOM Certificate







BUILT FOR LEARNERS
AT DIFFERENT CAREER STAGES



RECENT GRADUATES & POSTGRADUATES

Aspiring analysts and Data Science enthusiasts from B.Tech, M.Tech, B.Sc, M.Sc, BCA and MCA backgrounds with basic coding knowledge.

IT & ENGINEERING PROFESSIONALS

Developers and engineers looking to transition into Data Science or strengthen their technical skill sets.

EXPERIENCED DATA PROFESSIONALS

Data Analysts and Junior Data Scientists looking to upgrade their careers with new skills.

COMPLIMENTARY ACCESS TO 200+ SKILLING COURSES

- Python
- Data Science
- DSA across languages
- Competitive Coding
- Interview Preparation
- NLP and Deep Learning
- Pandas
- C and C++
- AI/ML
- GitHub
- Aptitude and more

OUR ALUMNI WORK AT THESE COMPANIES

Infosys, upGrad, whatfix, Texas Instruments, accenture, ZOHO
BOSCH, GaragePlug, simplilearn, KPMG, Mindtree, Persistent
airtel, CitiusTech, DXC Technology, Adobe, marlabs, L&T
Paytm, zeta, VISA, Locus, SAMSUNG, Microsoft
Flipkart, newgen, RIPPLING, FIREEYE, McAfee, SWIGGY
Jio Digital Life, Google, amazon, blinkit, Deloitte., & many more

TRUSTED BY STUDENTS ALL OVER INDIA

2000+
Students Secured Jobs With Us

1350+
Students Placed

₹10 LPA
Average CTC

₹20 LPA
Highest CTC Job Offer

PROGRAM FEE:
₹65,000/-

Scholarship:
Available for deserving candidates.

Financial support:
No-Cost EMI options available.