IPT EXCEL SCHOOL

LEARN • AUTOMATE • ANALYSE

LIVE ONLINE COURSE · OUTLINE 2026

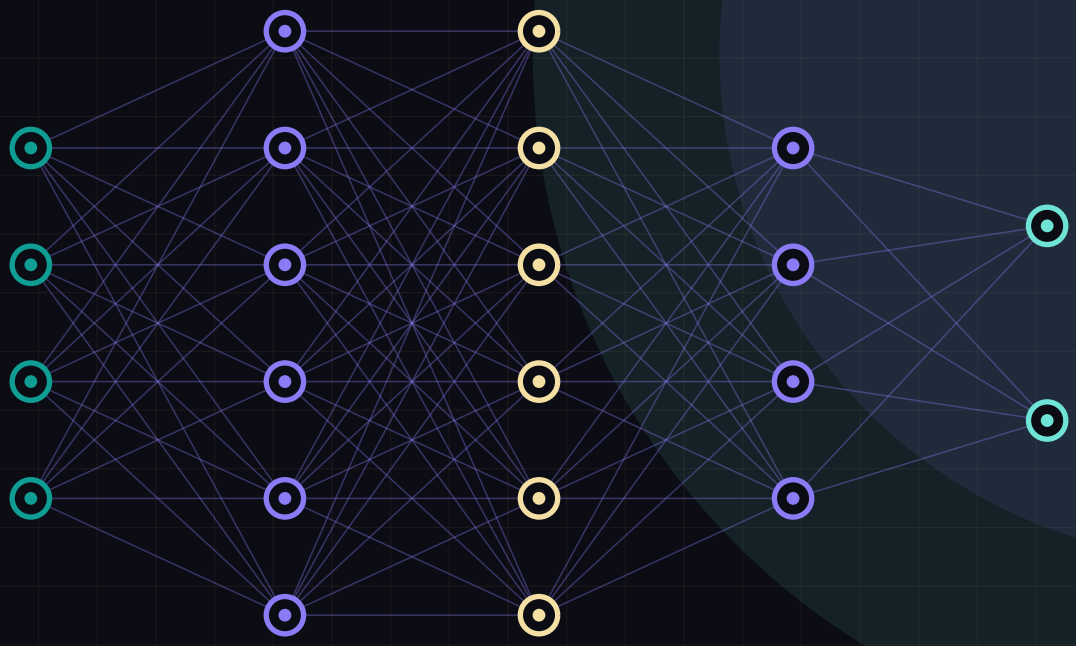
Artificial Intelligence

(AI) Training

Python · Machine Learning · Deep Learning

Generative AI · RAG · AI Agents · Capstone Project

60	12	120	10
DAYS	WEEKS	HOURS	PROJECTS



Live classes with Sujeet Sir · Hindi or English · Certificate

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Arijpur, Rajla, Kurhani, Muzaffarpur, Bihar 844120 · Teaching online since 2007

Course at a glance

A beginner-friendly, project-based path from Python basics to Machine Learning, Deep Learning, Generative AI, RAG and AI agents. Every day is about 2 hours: roughly 1 hour of concept and 1 hour of hands-on practice.

Duration	60 days (12 weeks, 5 days a week)
Daily class	About 2 hours: 1 hour concept and 1 hour hands-on practice (about 120 hours in total)
Level	Beginner to Advanced
Batch size	1 to 3 students (one-to-one or small group)
Mode	Live online on Google Meet
Language	Hindi or English
Projects	10 projects including a capstone
Certificate	Yes, with real project work
Support	Phone and Google Meet doubt support
Demo	Free 3-4 day demo class
Fees	Contact Sujeet Sir: +91 88025 79388

What you will learn

1. AI foundations
AI, ML, DL and GenAI, real-world use cases and demos of popular AI tools.

2. Python for AI
Python basics, data structures, functions, files and NumPy.

3. Data analysis
Pandas, data cleaning, Matplotlib, Seaborn and EDA on real data.

4. Machine Learning
Regression, classification, clustering and model evaluation.

5. Deep Learning
Neural networks, Keras/TensorFlow and a CNN image classifier.

6. Generative AI and LLMs
Prompt engineering, AI APIs and a Python chatbot with memory.

7. RAG and AI agents
Embeddings, vector databases, Chat with your PDF and function-calling agents.

8. AI at work and deployment
AI in Excel and Power BI, Streamlit apps, Git, ethics and a capstone project.

Benefits, goal and who should learn

BENEFITS

- Build real AI and ML projects from scratch
- Learn Python, data analysis and ML step by step
- Use LLMs, RAG and AI agents in real apps
- Finish with a capstone and certificate

YOUR GOAL

Become job-ready in AI: build, deploy and present your own AI projects with confidence.

WHO SHOULD LEARN

Students, working professionals, MIS and data staff and business owners who want to learn AI from the basics.

Day-wise plan: 60 days, 12 weeks

5 days a week, about 2 hours a day.

Week 1 · AI Foundations	
Day 1	What is AI, ML, DL, and GenAI? History and real-world examples
Day 2	AI use cases in business, education, and healthcare. Demo of popular AI tools
Day 3	Setting up the environment (Google Colab, Jupyter, VS Code)
Day 4	Python basics 1: variables, data types, operators, input/output
Day 5	Python basics 2: if/else, loops. Practice: 10 small programs

Week 2 · Python for AI	
Day 6	Lists, tuples, dictionaries, sets
Day 7	Functions, modules, and error handling
Day 8	File handling (CSV, JSON, text)
Day 9	NumPy: arrays, indexing, operations
Day 10	NumPy practice and mini quiz. Assignment: a basic statistics calculator

Week 3 · Data Analysis	
Day 11	Pandas: Series and DataFrames
Day 12	Loading, filtering, sorting, and grouping data
Day 13	Data cleaning: missing values, duplicates, outliers
Day 14	Matplotlib and Seaborn: charts and visualization
Day 15	Exploratory Data Analysis (EDA) on a real dataset. Mini project: Sales Data Analysis

Week 4 · Machine Learning Basics	
Day 16	ML concepts: supervised vs. unsupervised, train/test split
Day 17	Math intuition: mean, variance, correlation, probability (no heavy formulas)
Day 18	Linear Regression
Day 19	Regression practice. Project: House Price Prediction
Day 20	Model evaluation: MAE, MSE, R^2

Week 5 · Classification	
Day 21	Logistic Regression
Day 22	Decision Trees and Random Forest
Day 23	KNN and Naive Bayes
Day 24	Confusion matrix, precision, recall, F1-score
Day 25	Project: Customer Churn Prediction

Week 6 · Advanced ML	
Day 26	Overfitting, underfitting, and cross-validation
Day 27	Feature engineering and encoding
Day 28	Hyperparameter tuning (GridSearchCV)
Day 29	Clustering: K-Means
Day 30	Saving models (pickle/joblib). Mini project: Customer Segmentation

Week 7 · Deep Learning	
Day 31	Neural networks: neurons, layers, activation functions
Day 32	Forward pass, loss, backpropagation (intuitive)
Day 33	Building a first neural network with Keras/TensorFlow
Day 34	CNNs for image data
Day 35	Project: Handwritten Digit or Cat-vs-Dog Classifier

Week 8 · Generative AI and LLMs	
Day 36	How LLMs work: tokens, transformers, context window (simple)
Day 37	Prompt engineering 1: zero-shot, few-shot, role prompts
Day 38	Prompt engineering 2: structured outputs, chain-of-thought, prompt templates
Day 39	Using AI APIs from Python (keys, requests, responses)
Day 40	Mini project: a Python chatbot with conversation memory

Week 9 · Applied GenAI	
Day 41	Embeddings and vector databases
Day 42	RAG concepts and architecture
Day 43	Building RAG, part 1: loading and chunking PDFs
Day 44	Building RAG, part 2: retrieval and answering
Day 45	Project: “Chat with your PDF” app

Week 10 · Agents and Automation	
Day 46	AI agents: concept, tools, function calling
Day 47	Building a simple agent (calculator, web search, file reader)
Day 48	Workflow automation: email, reports, and spreadsheet automation with Python and AI
Day 49	No-code and low-code AI tools
Day 50	Image, audio, and video generation tools

Week 11 · AI for Productivity and Deployment	
Day 51	AI in Excel and Power BI (formulas, insights, report summaries)
Day 52	Data analysis with AI assistants
Day 53	Building a UI with Streamlit
Day 54	Deploying an app (Streamlit Cloud/Hugging Face Spaces)
Day 55	Git and GitHub basics, and portfolio setup

Week 12 · Ethics, Capstone, and Careers	
Day 56	AI ethics: bias, privacy, hallucinations, responsible use
Day 57	Capstone planning, dataset selection, and architecture
Day 58	Capstone building
Day 59	Capstone testing, documentation, and presentation preparation
Day 60	Project presentations, career guidance (roles, resume, interviews), and certificates

Capstone ideas

- Document Q&A; chatbot (RAG)
- Sales forecasting dashboard
- AI resume screener
- Customer support bot
- Student performance predictor

Suggested daily class format (2 hours)

10 min	Recap of the previous day
50 min	New concept with live demo
45 min	Hands-on exercise
15 min	Assignment and Q&A;

Book your free demo class

Attend the free 3-4 day demo first. If you like the class, pay the fees and your course starts. Call or WhatsApp Sujeet Sir: +91 88025 79388 · www.iptindia.com