Skillcept.Online

SYLLABUS · NOVEMBER 2026

DATA SCIENCE & AI JOB GUARANTEE PROGRAM

From Python *to AI agents.*

Ten modules from your very first line of code. Six core modules make you placement-ready; then Modern AI and the AI Engineer Stack, on the tools AI teams use today.

10	110+	Up to 25	Up to 67
modules	tools you'll use	capstones, by plan	projects



Learn, get hired, *then pay the main fee.*

Not placed after completing the program? Get 100% of your registration back and pay ₹0 after that.

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YOUR PATH

Six modules to placement-ready.
Four more to stand out.

The core comes first, on every plan: 4 to 6 months to placement-ready on Go and Plus (about 6 at 10 hours a week, about 4 at 15), 6 to 8 months on Infinity's live weekends. Complete the program and your interviews can start, while Modern AI and the AI Engineer Stack carry on.

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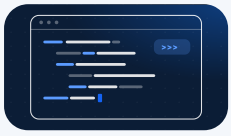
MODULE	GO	PLUS	INFINITY
 Python from zero	✓	✓	✓
 Probability & statistics for data science	✓	✓	✓
 Data analysis & visualisation	✓	✓	✓
 SQL for data analysis	✓	✓	✓
 Machine learning	✓	✓	✓
 Deep learning	✓	✓	✓
THE COMPETENCY TEST			
 Modern AI	✓	✓	✓
 GenAI & LLMs	–	✓	✓
 Production RAG & LLMOps	–	–	✓
 Agentic AI	–	–	✓

Completing the program means the 6 core modules, 5 capstones in 15 days, passing the competency test and signing the agreement within 30 days (on Infinity, also 75% of your batch's live classes for the core modules). It unlocks your interviews, the refund of your registration with its GST, and the ₹0 promise if you're not placed.

THE CORE · EVERY PLAN

The 6 core *modules.*

From your first line of code to deep learning. Completing them, with 5 capstones in 15 days, the competency test and signing within 30 days (on Infinity, also 75% live-class attendance), completes the program.



MODULE 1

Python from zero

About 51 hours · every plan

Starts at your very first line of code and builds the logic every later module uses, with practice after every lesson.

YOU'LL LEARN

- Variables, numbers and strings
- Lists, tuples, dictionaries and sets
- Loops, conditions and functions
- Modules, dates and times
- Reading and writing files, CSV and JSON
- Errors and exceptions
- Object-oriented programming
- Generators and lambdas
- Databases from Python with SQLite

TOOLS

Python · SQLite · JSON · CSV



MODULE 2

Probability & statistics for data science

About 10 hours · every plan

The maths behind every model, taught through examples, then put to work in Python.

YOU'LL LEARN

- Probability, combinatorics and Bayes' theorem
- Distributions
- Descriptive statistics
- Confidence intervals
- Hypothesis testing
- Linear and logistic regression in Python

TOOLS

Excel · Python · statsmodels



MODULE 3

Data analysis & visualisation

About 30 hours · every plan

The analyst's toolkit: Excel and Power BI the way companies use them, and pandas for data in Python.

YOU'LL LEARN

- Advanced PivotTables, slicers and Excel dashboards
- Power Query to clean and combine data
- Data models and DAX measures
- Power BI reports: modelling, visuals and design
- NumPy and pandas
- Cleaning and preparing data
- Text data and files
- Collecting data from web APIs

TOOLS

Excel · Power Query · Power Pivot · DAX · Power BI · NumPy · pandas · Jupyter



MODULE 4

SQL for data analysis

About 11 hours · every plan

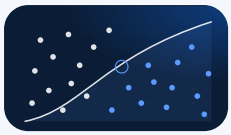
SQL from zero on a real company database, up to the queries analyst interviews test.

YOU'LL LEARN

- Relational databases and SQL basics
- Selecting, filtering and sorting
- Aggregate functions
- Joins, subqueries and self joins
- Views, stored procedures and functions
- Triggers, indexes and variables
- Window functions, CTEs and temporary tables
- From SQL to Tableau dashboards

TOOLS

MySQL · MySQL Workbench · Tableau



MODULE 5

Machine learning

About 19 hours · every plan

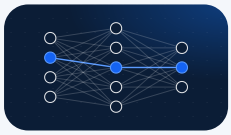
The models data scientists use every day, how to test them honestly, and a first look at generative AI.

YOU'LL LEARN

- Regression and predictive models
- Naive Bayes, decision trees, random forests and XGBoost
- SVM, KNN, k-means and PCA
- Recommender systems
- Reinforcement learning
- Cross-validation, precision, recall and ROC
- Messy data, outliers and unbalanced classes (SMOTE)
- Machine learning on big data with Apache Spark
- A/B testing
- Transformers, the OpenAI API, RAG and agents

TOOLS

XGBoost · Matplotlib · Seaborn · Apache Spark · Gym · TensorFlow · Keras · Hugging Face · OpenAI API · LangChain · RAGAS · MCP



MODULE 6

Deep learning

About 65 hours · every plan

How neural networks really learn, built by hand in PyTorch, up to the attention mechanism inside every LLM.

YOU'LL LEARN

- Gradient descent and how networks learn
- Building networks in PyTorch
- Overfitting, regularisation and dropout
- Optimisers, losses and weight initialisation
- Autoencoders
- CNNs for images, and transfer learning
- RNN, LSTM and GRU for sequences
- GANs
- Tokens, embeddings and attention
- GPT-2, built step by step

TOOLS

PyTorch · Google Colab

THE CAPSTONE LIBRARY

Up to 25 capstones.
Real problems, real brands.

After Module 6 you finish 5 capstones in 15 days, all five on Go, any five of ten on Plus, any five of all 25 on Infinity. Build the rest of your library whenever you like, for your portfolio.

A cheat sheet with every capstone. The whole process, step by step, so you always know the next move.

On every plan 5 capstones: submit all five

Flipkart · Every plan
Festive-sale dashboard
Sales, categories and returns across a big sale, in one Power BI report
Power BI · MySQL

zomato · Every plan
Restaurant ratings across cities
What makes a restaurant rate well, city by city and cuisine by cuisine
Excel · Power BI

Swiggy · Every plan
Delivery-time analysis
Where and when deliveries run late, and why
MySQL · pandas

Paytm · Every plan
UPI payments analytics
Who pays whom, when and how much, in SQL and a live dashboard
MySQL · Power BI

ZERODHA · Every plan
Stock portfolio tracker
Returns, risk and sector mix for a portfolio of NSE stocks
Python · Excel

Plus adds 5 more 10 on Plus: submit any 5

OLA · Plus · Infinity
Ride-demand forecast
Predict demand by zone and hour, so drivers are where riders will be
pandas

airtel · Plus · Infinity
Customer churn prediction
Find who is about to leave, and the offer that keeps them
XGBoost

PhonePe · Plus · Infinity
UPI fraud detection
Catch the rare fraudulent payment among millions of good ones
XGBoost · pandas

Myntra · Plus · Infinity
Fashion recommendations
"You might also like", built the way shopping apps build it
pandas

भारतीय रिज़र्व बैंक RESERVE BANK OF INDIA · Plus · Infinity
Inflation forecast
Forecast India's consumer price inflation, month by month
statsmodels · Python

Infinity adds 15 more

All 25 on Infinity: submit any 5

NYKAA — Infinity

Review sentiment in Hindi and English

Read thousands of beauty reviews and tell what customers feel

Hugging Face · PyTorch

amazon — Infinity

Product-search ranker

Rank the right products for what a shopper typed

PyTorch · Hugging Face

Jio — Infinity

Customer-support assistant

Answers plan and recharge questions from the help pages, with sources

LangChain · LlamaIndex

Flipkart — Infinity

Product image tagger

Tag catalogue photos automatically with transfer learning

PyTorch · Google Colab

Groww — Infinity

Stock price forecasting

Forecast prices with deep learning, and test it honestly

PyTorch · pandas

Uber — Infinity

Surge-price prediction

Predict when and where prices surge

XGBoost

Spotify — Infinity

Music recommendations

The next song a listener will love, from what they play

PyTorch · pandas

ZOHO — Infinity

Invoice reader

Read invoices and bills into clean data with document AI

PaddleOCR · OpenAI API

Razorpay — Infinity

Payment-failure prediction

Spot the payments likely to fail before they do

XGBoost · MLflow

भारत सरकार GOVERNMENT OF INDIA — Infinity

Crop price forecast

Mandi prices for farmers, forecast market by market

statsmodels · Streamlit

IMDb — Infinity

Movie recommender and box-office model

What to watch next, and what a film will earn

pandas

Google — Infinity

Speech to text in Indian languages

Turn Hindi, Tamil and Bengali speech into text

Whisper · Hugging Face

Tech Mahindra — Infinity

AI resume screener

Match resumes to a job description with an LLM, and explain why

LangChain · OpenAI API

Booking.com — Infinity

Hotel price prediction

What a room should cost, by city, season and rating

XGBoost

Microsoft — Infinity

"Talk to your data" agent

Ask a sales database in plain English, get the query and the chart

LangGraph · MCP

AFTER THE COMPETENCY TEST

Modules 7 to 10, *week by week.*

They come after the test, so your interviews can start sooner. Modern AI is on every plan; then 40 hours of the AI Engineer Stack, from prompts to AI agents: Module 8 on Plus, all three on Infinity.



MODULE 7

Modern AI

About 12 hours · every plan

WEEK 1

Open models and Hugging Face

The Hugging Face Hub, pipelines, model cards and licences; running open models on your own laptop; choosing a model; AI for Indian languages.

Transformers · Ollama · LM Studio · llama.cpp · Llama · Qwen · Gemma · Mistral · DeepSeek · Sarvam AI · AI4Bharat

- Project: customer-intent detection in English, Hindi and Tamil, on Amazon's MASSIVE data

WEEK 2

Vision, speech and documents

Object detection and segmentation, document AI, speech to text and back, models that read images, image generation and its rules.

Ultralytics YOLO · Segment Anything · PaddleOCR · Docling · Whisper · ElevenLabs · CLIP · Stable Diffusion · FLUX

- Project: a receipt and report reader, on IBM's DocLayNet and NAVER Clova's receipts; speech to text in Indian languages, on Google's FLEURS

WEEK 3

AI at work

AI coding assistants and checking what they write, AI inside Excel and Power BI, no-code AI automation, responsible AI and India's DPDP Act.

GitHub Copilot · Cursor · Claude Code · Copilot in Excel · n8n

- Project: a daily air-quality report for Indian cities, on the Central Pollution Control Board's data



MODULE 8

GenAI & LLMs

About 14 hours · Plus · Infinity

WEEK 1

The LLM landscape and its APIs

Closed and open models, reasoning models, tokens and cost; one interface to many models; structured output, tool calling, streaming.

Anthropic Claude · Google Gemini · LiteLLM · OpenRouter · Pydantic · Instructor

- Lab: one task, five models, on PolyAI's Banking77 banking queries

WEEK 2

Prompt and context engineering, measured

System prompts, few-shot and reasoning; optimising prompts automatically; evaluation sets and LLM-as-judge; prompt injection and guardrails.

DSPy · promptfoo · DeepEval · Guardrails AI · Llama Guard

- Lab: a prompt test suite for complaint triage, on the US Consumer Financial Protection Bureau's complaints

WEEK 3

Embeddings and RAG

Embedding models, chunking, vector stores and retrieval with citations.

FAISS · Chroma · pgvector · Qdrant · Pinecone · LlamaIndex

- Lab: a tax-help assistant, on the Income Tax Department's Acts, circulars and FAQs

WEEK 4

Shipping GenAI apps, and first agents

Front ends and an API back end, questions to SQL, a first agent that uses MCP servers, agents on Azure.

Streamlit · Gradio · Chainlit · FastAPI · OpenAI Agents SDK · Claude Agent SDK · Azure AI Foundry

- The GenAI project: an annual-report analyst, on Infosys, Wipro, HDFC Bank and ICICI Bank's filings with the US SEC



MODULE 9

Production RAG & LLMOps

About 13 hours · Infinity

WEEK 1

Advanced RAG

Parsing PDFs, tables and scans; hybrid search, re-ranking and query rewriting; knowledge graphs; RAG over images.

Unstructured · LlamaParse · Cohere Rerank · BGE · Neo4j · GraphRAG

- Lab: a regulation assistant, on the EU AI Act and GDPR

WEEK 2

Evaluation and fine-tuning

RAG metrics and golden sets; prompting, RAG or fine-tuning; LoRA, QLoRA and DPO on small open models.

PEFT · TRL · Unsloth · bitsandbytes

- Lab: fine-tune a small model to triage the Consumer Financial Protection Bureau's complaints

WEEK 3

Serving and LLMOps

Serving open models, containers and GPUs; caching, rate limits and budgets; tracing and monitoring; the model registry; CI/CD.

vLLM · Docker · Kubernetes · Redis · Langfuse · LangSmith · Arize Phoenix · OpenTelemetry · MLflow · Weights & Biases · GitHub Actions

- Lab: ship the RAG service with tracing and an automatic test run

WEEK 4

Cloud, security and governance

Deploy on one cloud and compare the others; the OWASP Top 10 for LLM apps; removing personal data; guardrails and governance.

AWS Bedrock · Google Vertex AI · Databricks · Microsoft Presidio · NeMo Guardrails

- Project 1: a development-research assistant, on the World Bank's reports and indicators



MODULE 10

Agentic AI

About 13 hours · Infinity

WEEK 1

Agents from first principles, and MCP

The agent loop, tools, planning and memory; an agent from scratch; your own MCP server; agents talking to agents.

MCP SDK · A2A · Mem0

- Lab: your own MCP server for Microsoft's AdventureWorks sales database

WEEK 2

Multi-agent frameworks

State and graphs, human approval, hand-offs and recovery; the same agent built in three frameworks.

LangGraph · CrewAI · Microsoft Agent Framework · Google ADK · Pydantic AI · smolagents

- Lab: a climate and energy briefing team, on NASA and NOAA weather data

WEEK 3

Agents that act

Browser and voice agents, agentic automation, evaluating agents, safety and cost control, managed agent platforms.

Playwright · LiveKit Agents · Bedrock AgentCore · Vertex AI Agent Engine

- Lab: a voice banking assistant, on Google's and PolyAI's banking dialogues

WEEK 4

The stack sprint and demo day

Designing LLM systems for the interview round, the questions AI Engineer interviews ask, a portfolio that gets callbacks.

- Projects 2 and 3: a customer-support agent for an online store, on Bitext's support data and Microsoft's AdventureWorks; a data-science copilot, on the Government of India's open data

THE TOOLS

110+ tools, *from Excel to AI agents.*

Every one used in a lesson or a lab, not just named.

The core Modules 1 to 6 · every plan

- Python
- SQLite
- Excel
- Power Query
- Power Pivot
- DAX
- Power BI
- Jupyter
- NumPy
- pandas
- Matplotlib
- Seaborn
- statsmodels
- MySQL
- MySQL Workbench
- Tableau
- XGBoost
- Apache Spark
- Gym
- TensorFlow
- Keras
- PyTorch
- Google Colab
- Hugging Face
- OpenAI API
- LangChain
- RAGAS
- MCP

Modern AI Module 7 · every plan

- Transformers
- Ollama
- LM Studio
- llama.cpp
- Llama
- Qwen
- Gemma
- Mistral
- DeepSeek
- Sarvam AI
- AI4Bharat
- Ultralytics YOLO
- Segment Anything
- PaddleOCR
- Docling
- Whisper
- ElevenLabs
- CLIP
- Stable Diffusion
- FLUX
- GitHub Copilot
- Cursor
- Claude Code
- Copilot in Excel
- n8n

GenAI & LLMs Module 8 · Plus · Infinity

- Anthropic Claude
- Google Gemini
- LiteLLM
- OpenRouter
- Pydantic
- Instructor
- DSPy
- promptfoo
- DeepEval
- Guardrails AI
- Llama Guard
- FAISS
- Chroma
- pgvector
- Qdrant
- Pinecone
- LlamaIndex
- Streamlit
- Gradio
- Chainlit
- FastAPI
- OpenAI Agents SDK
- Claude Agent SDK
- Azure AI Foundry

LLMOps, cloud and agents Modules 9 and 10 · Infinity

- Unstructured
- LlamaParse
- Cohere Rerank
- BGE
- Neo4j
- GraphRAG
- PEFT
- TRL
- Unsloth
- bitsandbytes
- vLLM
- Docker
- Kubernetes
- Redis
- Langfuse
- LangSmith
- Arize Phoenix
- OpenTelemetry
- MLflow
- Weights & Biases
- GitHub Actions
- AWS Bedrock
- Google Vertex AI
- Databricks
- Microsoft Presidio
- NeMo Guardrails
- MCP SDK
- A2A
- Mem0
- LangGraph
- CrewAI
- Microsoft Agent Framework
- Google ADK
- Pydantic AI
- smolagents
- Playwright
- LiveKit Agents
- Bedrock AgentCore
- Vertex AI Agent Engine

CERTIFICATES

Up to 10 certifications worth about ₹1,04,000, *included.*

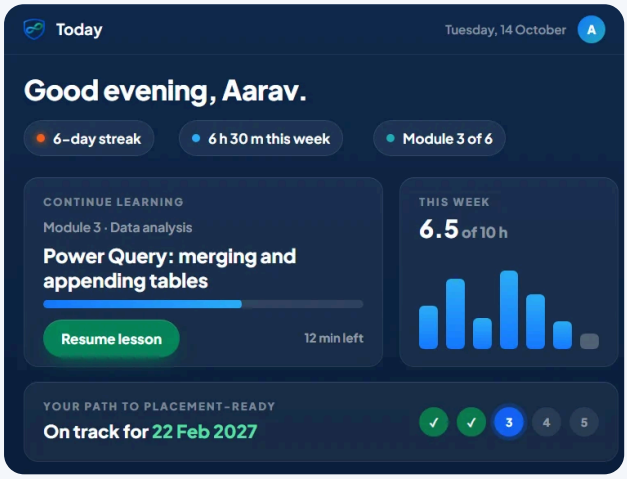
From Microsoft, AWS, Google Cloud, Databricks and NVIDIA, each issued and verified by the company itself: 1 on Go, 3 on Plus, all 10 on Infinity. Your free exams come once you complete the program, with our help to clear every exam, and our own verified certificate is on every plan.



		WORTH	GO	PLUS	INFINITY
Microsoft	**Power BI Data Analyst** PL-300 · Every plan	₹4,865	✓	✓	✓
Microsoft	**Azure AI Fundamentals** AI-901 · Plus · Infinity	₹3,691	–	✓	✓
Microsoft	**Azure AI Apps and Agents** AI-103 · Plus · Infinity	₹4,865	–	✓	✓
Microsoft	**MLOps Engineer Associate** AI-300 · Infinity	₹4,865	–	–	✓
	Verified program certificate Every plan	Included	✓	✓	✓
aws	**Certified AI Practitioner** AIF-C01 · Infinity	₹8,800	–	–	✓
aws	**Machine Learning Engineer, Associate** MLA-C01 · Infinity	₹13,200	–	–	✓
Google Cloud	**Professional Machine Learning Engineer** Infinity	₹17,600	–	–	✓
databricks	**Generative AI Engineer Associate** Infinity	₹17,600	–	–	✓
databricks	**Machine Learning Associate** Infinity	₹17,600	–	–	✓
NVIDIA	**Generative AI LLMs Associate** NCA-GENL · Infinity	₹11,000	–	–	✓

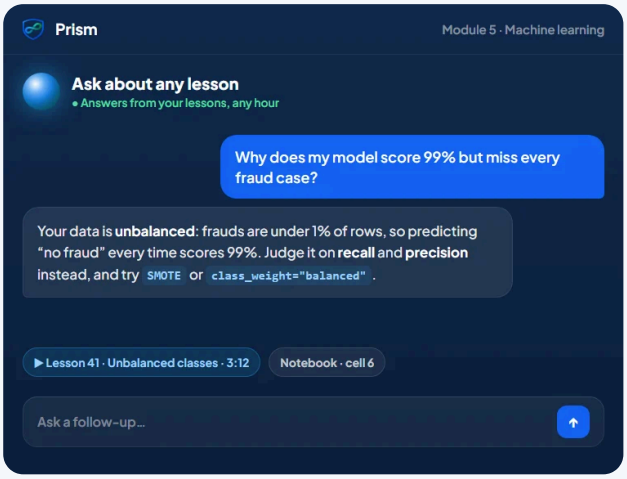
HOW YOU LEARN

Live weekends or your own pace.
Help a message away.



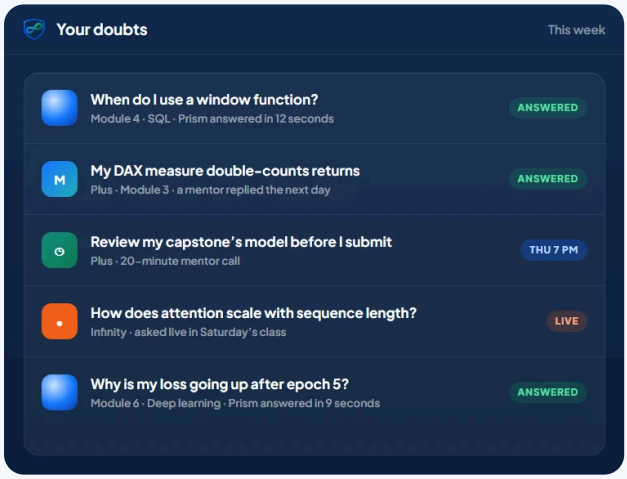
The learning platform

Short video lessons, notes and a lab every week, opening one after another as you finish. Lifetime access to the core modules.



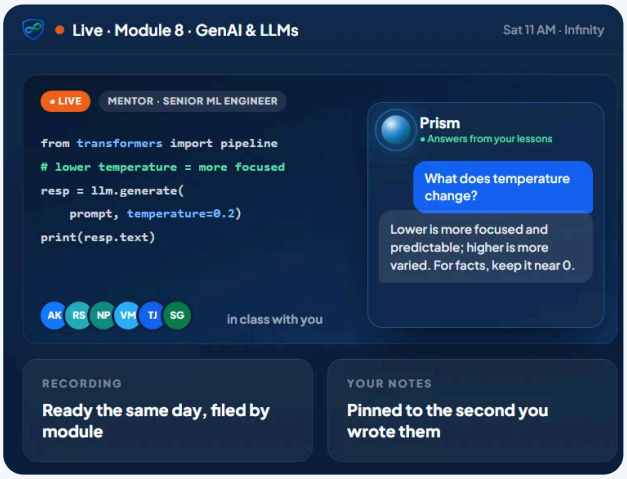
Prism, your AI doubt helper

Our AI assistant for your doubts, any time of day, on Go and Infinity, alongside your plan's human support.



Doubt support, by plan

Go	Support portal + Prism, the AI doubt helper
Plus	A mentor answers in the support portal; a 20-min mentor call if a doubt waits over 48 hours (up to 4 a month)
Infinity	Live in your weekend classes + Prism, the AI doubt helper



Live weekends on Infinity

Saturday and Sunday, 11 AM to 2 PM IST, at most 75 in a batch, with live mentors. Pause once for up to a year while you're doing the core.

Skillcept.Online

DATA SCIENCE & AI JOB GUARANTEE PROGRAM

Start from your first line of code. *Pay the main fee once it pays you.*

Learn, get hired, then pay the main fee. Not placed after completing the program? Get 100% of your registration back and pay ₹0 after that.

READY WHEN YOU ARE

Scan, or tap, to choose your plan.

Today's price for each plan and the terms in full, on one page.

Start now →

Questions: support@skillcept.online · WhatsApp +91 98773 41901. This syllabus is the Curriculum page as of November 2026; modules and tools are updated as the industry moves, and the Terms and conditions decide what each plan includes. Algorythm Ceptx Edutech Private Limited.