



WORLD-CLASS JOB-READY CURRICULUM · FOR FRESH GRADUATES

APEX AI · ML Cloud · Security Engineering Program

A 16-week, project-driven mastery track that transforms fresh graduates into industry-ready engineers — Python, Machine Learning, Generative & Agentic AI, Data Science, Multi-Cloud (AWS), DevOps and Cyber Security, taught the way real teams build and ship.

★ World's Best Curriculum

100% Placement Guarantee

Taught by Industry Experts

Python

Generative AI

Agentic AI

Data Science

Machine Learning

AWS Multi-Cloud

DevOps

Cyber Security

16 wks
Intensive hands-on training across 4 phases

4 +
Real-time, resume-ready industry projects

8
In-demand technology domains, one track

100%
Placement guarantee with relentless interview prep

Cloud Soft Solutions

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ABOUT THE INSTITUTE

Built by practitioners. Trusted by employers.

Cloud Soft Solutions is a Hyderabad-based IT training and placement institute helping graduates and early-career professionals break into high-growth technology careers. Headquartered in Ameerpet — India's largest IT-training hub — we deliver a **world-class, industry-aligned curriculum** in cloud, AI, data and DevOps, taught by working engineers and backed by a **100% placement guarantee**.



Industry-First Curriculum

Course content modelled on real engineering teams — the same tools, workflows and trade-offs you will meet on the job.



Project-Driven Learning

You don't just watch — you build. Every phase ends in a working deliverable that goes straight into your portfolio.



100% Placement Guarantee

Resume engineering, LinkedIn optimisation, unlimited mock interviews and active placement drives — backed until you are placed.

Why graduates choose this program

- ✓ **A world-class, industry-aligned curriculum.** Built around the exact skills companies are hiring for right now — AI, ML, cloud, DevOps and security — and refreshed continuously to stay at the cutting edge.
- ✓ **One track, eight high-demand domains.** Instead of scattered short courses, you graduate as a full-stack AI-Cloud engineer who can build, deploy and secure intelligent applications end-to-end.
- ✓ **Taught by working engineers.** Mentors with real production experience in cloud, AI and DevOps — not just slides, but war stories and best practices.
- ✓ **Real-time scenarios in every module.** Each week is anchored to a problem a real company faces, so you learn the "why" behind the "how".
- ✓ **A portfolio that gets interviews.** Four progressively harder projects culminate in a production-grade, secure AI cloud platform you can demo with confidence.
- ✓ **Career support that doesn't stop at the certificate.** Aptitude, communication, DSA refreshers, system-design basics and interview practice are built into the program.

WHO THIS PROGRAM IS FOR

Fresh graduates (BE / B.Tech / MCA / B.Sc / M.Sc / BCA / degree) and early-career professionals who want a single, structured path into AI, cloud and DevOps roles. No prior coding experience is assumed — we start from fundamentals and ramp you to job-ready depth.

PROGRAM OVERVIEW

The skills employers are **actually hiring for.**

The market has shifted. Companies no longer want narrow specialists who can only train a model or only write Terraform. They want engineers who can take an idea — an AI assistant, a data product, a smart automation — and carry it all the way to a secure, monitored, production deployment. This program is engineered around exactly that profile.

Program at a glance

Attribute	Detail
Duration	4 months · 16 weeks · 4 structured phases
Format	Instructor-led, hands-on labs every session · classroom & live-online options
Effort	Daily sessions + guided practice + project sprints + weekend doubt-clearing
Projects	4+ real-time projects (one per phase) building toward a capstone platform
Assessment	Weekly hands-on tasks, phase assessments, project reviews, mock interviews
Prerequisites	Basic computer literacy and logical aptitude · graduation in any stream
Outcome	Job-ready AI-Cloud engineer + portfolio + course completion certificate + 100% placement guarantee

How you'll learn — the 70/20/10 model

70

Hands-On Building

Most of your time is spent writing code, breaking things, debugging and shipping — on your own machine and on the cloud.

20

Guided Mentoring

Live walkthroughs, code reviews and architecture discussions with engineers who have built real systems.

10

Concepts & Theory

Just enough foundational theory to understand the "why" — never theory for its own sake.

The learning journey — four phases

Phase	Focus	What you walk away able to do
Month 1 Weeks 1-4	Python, Cloud & AI Foundations	Write solid Python, deploy your first app to AWS, and build your very first GenAI-powered, agentic application — all in month one.

	Python · AWS · GenAI · Agents · Data	
Month 2 Weeks 5–8	Machine Learning, GenAI & Agentic AI ML · DL · LLMs · RAG · Agents	Train and deploy ML models, engineer prompts, and build Retrieval-Augmented and agentic AI applications.
Month 3 Weeks 9–12	Multi-Cloud (AWS) & DevOps AWS · Docker · K8s · Terraform · CI/CD	Provision cloud infrastructure as code and ship containerised apps through automated CI/CD pipelines.
Month 4 Weeks 13–16	Cyber Security, DevSecOps & Capstone Security · DevSecOps · Capstone · Placement	Secure cloud and AI applications, embed security into pipelines, and ship a production-grade capstone.

THE THREAD THAT TIES IT TOGETHER

Each project deliberately builds on the last. You analyse data (Project 1), make it intelligent with GenAI and agents (Project 2), ship it to the cloud with full DevOps automation (Project 3), and finally harden the whole thing into a secure, production-grade platform (Capstone). One coherent story — a portfolio that proves you can do the whole job.

LEARNING OUTCOMES & CAREERS

Where this program takes you.

By graduation, you will be able to

- ✓ Build clean, tested, production-grade Python applications and automation.
- ✓ Clean, transform, analyse and visualise real-world datasets end-to-end.
- ✓ Train, evaluate, tune and deploy classical and ensemble ML models.
- ✓ Engineer prompts and build GenAI applications on top of modern LLMs.
- ✓ Design Retrieval-Augmented Generation (RAG) and multi-agent AI systems.
- ✓ Architect, provision and operate workloads on AWS using Infrastructure as Code.
- ✓ Containerise and orchestrate apps with Docker and Kubernetes through CI/CD.
- ✓ Secure cloud, container and AI workloads and embed DevSecOps into pipelines.

Job roles you'll be ready to target

<p>AI / ML Engineer</p> <p>Build, train and operationalise machine-learning and deep-learning models.</p>	<p>Generative AI Engineer</p> <p>Design LLM, RAG and agentic applications and put them into production.</p>
<p>Data Scientist / Data Analyst</p> <p>Turn raw data into insight, models and decisions.</p>	<p>Cloud Engineer (AWS)</p> <p>Architect, deploy and manage scalable cloud infrastructure.</p>
<p>DevOps Engineer</p> <p>Automate build, deploy and release with CI/CD, containers and IaC.</p>	<p>Cloud Security / DevSecOps Engineer</p> <p>Secure cloud workloads and shift security left into pipelines.</p>
<p>Python Developer</p> <p>Build backend services, APIs and automation in Python.</p>	<p>MLOps / Site Reliability Engineer</p> <p>Operate, monitor and reliably scale ML and cloud systems.</p>

CERTIFICATION READINESS

The cloud and DevOps phases map directly to industry certifications — preparing you for **AWS Certified Cloud Practitioner**, **AWS Certified Solutions Architect – Associate**, and foundational readiness for container/Kubernetes and security credentials — alongside your Cloud Soft Solutions completion certificate.

PHASE 1 · CURRICULUM

Month 1 — Python, Cloud & AI Foundations

FOUNDATION PHASE · WEEKS 1-4

01

Python, your first cloud deploy & your first AI app

Leads into Project 1

No waiting months to touch the exciting tech. From week one you write Python and launch resources on AWS — and by week four you've built your first GenAI-powered, agentic application on real data.

WEEK 01

Python Essentials & Your Cloud Launchpad

Programming fundamentals — plus your very first step into the cloud.

CORE TOPICS

- Environment setup: Python, pip, virtual environments, VS Code & Jupyter
- Variables, data types, operators, input/output and string formatting
- Control flow: conditionals, for/while loops, comprehensions
- Core data structures: lists, tuples, sets, dictionaries
- Functions, scope, default/keyword args, *args & **kwargs, lambda
- **Cloud fundamentals:** what the cloud is, regions & key AWS services, creating your AWS account & navigating the console

HANDS-ON LABS

- ▶ Build a command-line calculator & number-game
- ▶ Text-processing utility (word counts, cleaning)
- ▶ Create your AWS Free-Tier account & launch your first cloud resource

REAL-TIME SCENARIO

Build a CLI **Expense Tracker** and set up the **AWS cloud account** you'll deploy your projects to — writing real code and stepping into the cloud from day one.

WEEK
02**Advanced Python, Git & AWS Core Services**

OOP and clean code — and your app running on a real cloud server.

CORE TOPICS

- OOP: classes, objects, inheritance, polymorphism, encapsulation, dunder methods
- Modules, packages & project structure; file handling (CSV/JSON), exceptions & logging
- Iterators, generators, decorators, type hints
- Consuming REST APIs with requests; testing with pytest
- Version control: Git & GitHub — branches, commits, pull requests
- **AWS core services:** EC2 (virtual servers), S3 (object storage) & IAM (users, roles & access)

HANDS-ON LABS

- ▶ Model a domain with classes & write pytest unit tests
- ▶ Initialise a Git repo, branch & push to GitHub
- ▶ Deploy a Python app to a live AWS EC2 instance

REAL-TIME SCENARIO

Build a **Live Weather & News service**, version-control it on GitHub, and deploy it to a real **EC2 server on AWS** — your first application running in the cloud.

WEEK
03**Data with Pandas & SQL + Your First GenAI App**

Wrangle real, messy data — and start building with large language models.

CORE TOPICS

- NumPy: arrays, vectorisation, broadcasting, numerical operations
- Pandas: DataFrames, cleaning, filtering, grouping, merge/join, pivots
- Reading data from CSV, Excel, JSON, APIs and databases
- SQL essentials: SELECT, WHERE, JOIN, GROUP BY; Python ↔ database
- **The GenAI landscape:** LLMs — GPT, Claude, Llama, Gemini — and how they work
- **Building with GenAI:** calling LLM APIs from Python, prompt-engineering basics & structured output

HANDS-ON LABS

- ▶ Clean a messy retail dataset & join multiple tables
- ▶ Query a SQL database from Python
- ▶ Build a GenAI-powered text assistant using an LLM API

REAL-TIME SCENARIO

Turn a raw **e-commerce sales export** into clean, analysis-ready data — then add a **GenAI layer** that auto-summarises the key insights in plain English.

WEEK
04**EDA, Visualisation & Your First AI Agent**

Tell the story in the data — and build an autonomous AI assistant.

CORE TOPICS

- Visualisation with Matplotlib, Seaborn & Plotly
- Exploratory Data Analysis (EDA) — a repeatable workflow
- Statistics for data science: distributions, hypothesis testing, correlation
- Data storytelling & building interactive apps with Streamlit
- **Agentic AI intro:** what an AI agent is — tools, actions & the ReAct pattern
- **Build an agent:** a simple tool-using AI assistant on top of an LLM

HANDS-ON LABS

- ▶ Full EDA on a real dataset with a visual report
- ▶ Ship an interactive Streamlit dashboard
- ▶ Build your first AI agent that uses a tool (search / calculator)

REAL-TIME SCENARIO · PROJECT 1 KICKOFF

Build an interactive **Sales-Insights Dashboard** in Streamlit with a built-in **AI assistant** that answers questions about the data in plain English — the foundation of your first project.

PHASE 2 · CURRICULUM

Month 2 — Machine Learning, GenAI & Agentic AI

INTELLIGENCE PHASE · WEEKS 5-8

02

Make your applications think

You've already built your first GenAI app and AI agent — now go deep: classical and advanced machine learning, deep learning, and production-grade Retrieval-Augmented and multi-agent systems.

Leads into Project 2

WEEK **05** **Machine Learning Foundations — Supervised Learning**
The ML lifecycle and the core algorithms, done properly.

CORE TOPICS

- ML lifecycle, problem framing, train/validation/test split, cross-validation
- The scikit-learn workflow & pipelines
- Regression: linear, polynomial, regularisation (Ridge / Lasso)
- Classification: logistic regression, KNN, decision trees, SVM, Naive Bayes
- Feature engineering: scaling, encoding, transformation
- Evaluation: accuracy, precision, recall, F1, ROC-AUC, RMSE, R²

HANDS-ON LABS

- ▶ Build a regression model end-to-end
- ▶ Train a multi-class classifier with a pipeline
- ▶ Compare models with proper metrics

REAL-TIME SCENARIO

Build a **Customer Churn Predictor** for a telecom company — identify which subscribers are about to leave so the business can act first.

WEEK **06** **Advanced ML, Tuning & Model Deployment**
Ensembles, optimisation and serving models as real APIs.

CORE TOPICS

- Ensembles: Random Forest, Gradient Boosting, XGBoost, LightGBM
- Unsupervised learning: K-Means, hierarchical clustering, PCA
- Hyperparameter tuning: GridSearch, RandomSearch, Optuna
- Imbalanced data & model interpretability with SHAP
- Model persistence (joblib) & serving with FastAPI
- MLOps intro: experiment tracking with MLflow

HANDS-ON LABS

- ▶ Boosted model + hyperparameter search
- ▶ Customer segmentation with clustering
- ▶ Wrap a model in a FastAPI prediction API

REAL-TIME SCENARIO

Build a **Fraud-Detection model** on imbalanced transaction data and expose it as a live FastAPI endpoint that returns a risk score in real time.

WEEK
07

Deep Learning & Generative AI Foundations

Neural networks, transformers and the modern LLM toolkit.

CORE TOPICS

- Neural-network fundamentals: layers, activations, backprop (intuition)
- Deep learning with TensorFlow/Keras & PyTorch basics
- CNNs for images & transfer learning; RNN/LSTM for sequences
- Transformers & attention — how LLMs actually work
- The GenAI landscape: GPT, Claude, Llama, Gemini & open models
- Prompt engineering: zero/few-shot, chain-of-thought, system prompts, structured output
- Using LLM APIs; tokens, context windows, temperature; embeddings & semantic search

HANDS-ON LABS

- ▶ Image classifier via transfer learning
- ▶ Call an LLM API with structured output
- ▶ Build a semantic-search demo with embeddings

REAL-TIME SCENARIO

Build a **prompt-engineered content & code assistant** that produces reliable, structured responses — your first taste of building with generative AI, not just using it.

WEEK
08

Agentic AI, RAG & LLM Application Engineering

Retrieval, tools, memory and multi-agent orchestration.

CORE TOPICS

- Retrieval-Augmented Generation (RAG) architecture end-to-end
- Vector databases (FAISS, Chroma, Pinecone), chunking & embeddings
- Orchestration frameworks: LangChain & LlamaIndex
- AI agents: ReAct pattern, tool / function calling
- Multi-agent orchestration with LangGraph & CrewAI; planning & memory
- Guardrails, evaluation, hallucination mitigation, cost & latency optimisation
- Chat UIs with Streamlit / Gradio over a FastAPI backend

HANDS-ON LABS

- ▶ Build a RAG pipeline over your own documents
- ▶ Create a tool-using agent (search + calculator)
- ▶ Orchestrate two agents on one task

REAL-TIME SCENARIO · PROJECT 2 KICKOFF

Build an **Enterprise Document Q&A Assistant** (RAG) plus an autonomous support agent that can look things up and take actions — the intelligence core of your second project.

PHASE 3 · CURRICULUM

Month 3 — Multi-Cloud (AWS) & DevOps

PRODUCTION PHASE · WEEKS 9-12

03

Ship it — at scale, in the cloud

You launched your first app on AWS back in month one — now master the cloud: infrastructure as code, containers, Kubernetes and fully automated delivery pipelines that ship at scale.

Leads into Project 3

WEEK **09** **Cloud Computing & AWS Core Services**
 Compute, storage and networking — the AWS foundation.

CORE TOPICS

- Cloud concepts: IaaS / PaaS / SaaS, regions & AZs, shared responsibility
- IAM: users, groups, roles, policies, MFA & least privilege
- Compute: EC2, AMIs, instance types, security groups, Auto Scaling, Load Balancers
- Storage: S3 (versioning, lifecycle, static hosting), EBS, EFS
- Networking: VPC, subnets, route tables, IGW/NAT, SG vs NACL
- Multi-cloud awareness: mapping AWS ↔ Azure ↔ GCP services

HANDS-ON LABS

- ▶ Launch & secure an EC2 instance
- ▶ Host a static site on S3
- ▶ Build a custom VPC with public/private subnets

REAL-TIME SCENARIO
 Deploy a **scalable web application on EC2** behind a load balancer with auto-scaling — handling traffic spikes the way production systems must.

WEEK **10** **AWS Advanced & Cloud-Native Services**
 Serverless, managed databases, containers & AI on AWS.

CORE TOPICS

- Serverless: Lambda, API Gateway, EventBridge, Step Functions
- Databases: RDS (PostgreSQL/MySQL), DynamoDB, ElastiCache
- Containers on AWS: ECR, ECS (Fargate), EKS overview
- Infrastructure as Code with CloudFormation
- Messaging & observability: SQS, SNS, CloudWatch, CloudTrail
- AI/ML on AWS: SageMaker overview & Amazon Bedrock (GenAI)

HANDS-ON LABS

- ▶ Build a serverless API with Lambda + API Gateway
- ▶ Provision an RDS database
- ▶ Push a container image to ECR

REAL-TIME SCENARIO
 Deploy your **Project-2 AI assistant to AWS** using Lambda/ECS with S3 and API Gateway — taking a local prototype to a real cloud-hosted service.

WEEK
11

DevOps Foundations — Linux, Git, CI/CD & Docker

The automation backbone of modern engineering.

CORE TOPICS

- Linux administration: shell, file system, permissions, processes, networking
- Bash scripting & cron for automation
- Git advanced: branching strategies, PRs, merge vs rebase, GitHub/GitLab flow
- CI/CD concepts & pipelines with GitHub Actions and Jenkins
- Docker: images, Dockerfile, volumes, networks, Docker Compose, registries
- Artifact management & image best practices

HANDS-ON LABS

- ▶ Write bash scripts to automate tasks
- ▶ Containerise an app with a Dockerfile
- ▶ Build a CI pipeline that tests on every push

REAL-TIME SCENARIO

Containerise your **ML/AI application with Docker** and build an automated CI pipeline that tests and builds it on every commit — the foundation of reliable delivery.

WEEK
12

DevOps Advanced — Kubernetes, Terraform & Observability

Orchestrate, provision and monitor like an SRE.

CORE TOPICS

- Kubernetes: pods, deployments, services, ConfigMaps/Secrets, ingress, scaling
- Deploying to Amazon EKS; Helm basics
- Infrastructure as Code with Terraform: providers, resources, variables, state, modules (multi-cloud)
- Configuration management with Ansible (intro)
- GitOps with ArgoCD (intro)
- Monitoring & logging: Prometheus, Grafana, ELK / CloudWatch

HANDS-ON LABS

- ▶ Deploy a multi-service app to Kubernetes
- ▶ Provision AWS infra with Terraform modules
- ▶ Build a Grafana monitoring dashboard

REAL-TIME SCENARIO · PROJECT 3 KICKOFF

Stand up an end-to-end pipeline: **CI/CD → Docker → Kubernetes (EKS)** on Terraform-provisioned infrastructure, with Prometheus & Grafana monitoring — the deployment story of Project 3.

PHASE 4 · CURRICULUM

Month 4 — Cyber Security, DevSecOps & Capstone

MASTERY PHASE · WEEKS 13-16

04

Secure it, prove it, get hired

Harden everything you've built with security and DevSecOps, then bring all four phases together into a production-grade capstone — and get interview-ready.

Capstone + Placement

WEEK

13

Cyber Security Foundations

Threats, cryptography, identity and the OWASP Top 10.

CORE TOPICS

- Security principles: CIA triad, threats, vulnerabilities & risk
- Network security: firewalls, VPN, IDS/IPS, TLS/SSL, ports & protocols
- Cryptography: symmetric/asymmetric, hashing, PKI & certificates
- Identity & access: authentication, OAuth, JWT, SSO, MFA
- OWASP Top 10 web vulnerabilities: SQLi, XSS, CSRF and more
- Security tooling overview: Nmap, Wireshark, Burp Suite; Linux hardening

HANDS-ON LABS

- ▶ Scan a network & read the results
- ▶ Exploit & then fix an XSS / SQLi demo app
- ▶ Harden a Linux server checklist

REAL-TIME SCENARIO

Perform a **vulnerability assessment of a sample web application**, document the findings, and remediate them — thinking like both an attacker and a defender.

WEEK

14

Cloud Security & DevSecOps

Shift security left — into the cloud, containers and pipeline.

CORE TOPICS

- AWS security: IAM least privilege, KMS encryption, GuardDuty, Security Hub, WAF, secrets management
- Securing containers & Kubernetes: image scanning, RBAC, network policies
- DevSecOps: shift-left, SAST / DAST / SCA, secrets & supply-chain scanning
- Security in CI/CD with Trivy, Snyk & SonarQube
- Compliance awareness: GDPR, ISO 27001, SOC 2; logging & incident response
- Securing AI/LLM apps: prompt injection, data leakage, OWASP LLM Top 10

HANDS-ON LABS

- ▶ Add image scanning (Trivy) to the pipeline
- ▶ Lock down IAM & encrypt with KMS
- ▶ Add a secrets-scan & SAST gate to CI

REAL-TIME SCENARIO · CAPSTONE KICKOFF

Add a **security gate to your DevOps pipeline** and harden your cloud infrastructure — the DevSecOps layer that turns a working app into a production-grade one.

WEEK
15

Capstone Build & System Integration

Bring all four phases together into one platform.

CORE TOPICS

- End-to-end architecture design: AI/ML + agentic layer + cloud + DevOps + security
- Mentor-guided build sprints & structured code reviews
- Performance, scalability & cost optimisation
- Professional documentation: README, architecture diagrams, runbooks
- Debugging & troubleshooting across the stack

HANDS-ON LABS

- ▶ Integrate model + agent + cloud + pipeline
- ▶ Peer & mentor code review rounds
- ▶ Write production-grade documentation

REAL-TIME SCENARIO

Run real **capstone build sprints** — designing, integrating and reviewing the full platform under mentorship, exactly like a delivery team working toward a release.

WEEK
16

Capstone Finalisation, Portfolio & Placement Readiness

Demo it, package it, and walk into interviews prepared.

CORE TOPICS

- Capstone deployment, demo & presentation
- GitHub portfolio polishing & a technical project write-up / blog
- ATS-optimised resume building & LinkedIn optimisation
- Mock interviews — technical & HR rounds
- DSA refresher, coding-challenge practice & system-design basics
- Aptitude, communication & group-discussion practice

HANDS-ON LABS

- ▶ Final demo day presentation
- ▶ Recorded mock-interview rounds with feedback
- ▶ Polish resume, GitHub & LinkedIn

REAL-TIME SCENARIO · PLACEMENT

Present your capstone on **Demo Day** and run the mock-interview gauntlet, then enter active placement drives with a portfolio that proves you can do the job.

REAL-TIME PROJECTS

Four projects. One job-winning portfolio.

Every phase produces a real, working project — and each one deliberately builds on the last. By the end you don't have four disconnected demos; you have one coherent, production-grade platform that proves you can take an idea from data to a secure cloud deployment. This is the portfolio that gets you shortlisted.

01
PHASE 1 · DATA & ML
Months 1-2

InsightHub — Intelligent Data Analytics Platform

Business scenario: A growing e-commerce company is losing customers and can't see why. They need a platform that cleans their messy sales data, surfaces insights through an interactive dashboard, and predicts which customers are likely to churn — so the team can act before revenue walks out the door.

WHAT YOU BUILD

- A data pipeline that ingests and cleans raw sales data
- An interactive Streamlit analytics dashboard (revenue by region, product, time)
- A churn-prediction ML model with proper evaluation
- A built-in GenAI assistant that answers data questions in plain English

SKILLS DEMONSTRATED

- Data wrangling & EDA on real data
- Supervised ML & model evaluation
- Data storytelling & dashboarding
- Turning analysis into decisions

Python
Pandas
NumPy
scikit-learn
Plotly
Streamlit
SQL
LLM API

02
PHASE 2 · GENAI & AGENTS
Month 2

AskCloud — Agentic AI Enterprise Assistant

Business scenario: An organisation's staff waste hours hunting through internal documents and doing repetitive lookups. They want an AI assistant that answers questions from their own knowledge base and can take actions — search records, summarise, draft replies — reliably and without hallucinating.

WHAT YOU BUILD

- A RAG pipeline: document ingestion, chunking, embeddings & a vector store
- A multi-tool AI agent that can search, calculate and call functions
- A FastAPI backend with a Streamlit chat interface
- Guardrails, evaluation & cost/latency optimisation

SKILLS DEMONSTRATED

- Prompt engineering & LLM APIs
- RAG & vector search
- Agentic tool calling & orchestration
- Production LLM app engineering

LangChain
LlamaIndex
LangGraph
FAISS / Chroma
LLM APIs
FastAPI
Streamlit

03

PHASE 3 · CLOUD & DEVOPS

DeployX — Cloud-Native DevOps Pipeline on AWS

Month 3

Business scenario: The AI assistant works on a laptop — but the business needs it running reliably for thousands of users, deploying automatically on every code change, and scaling on demand. You build the production delivery platform that makes that possible.

WHAT YOU BUILD

- Containerise the application with Docker
- An automated CI/CD pipeline (GitHub Actions / Jenkins) pushing to ECR
- Deployment to Kubernetes on Amazon EKS (with ECS option)
- AWS infrastructure provisioned with Terraform; Prometheus + Grafana monitoring

SKILLS DEMONSTRATED

- Containerisation & orchestration
- Infrastructure as Code (Terraform)
- CI/CD automation & cloud deployment
- Observability & reliability

Docker
Kubernetes
Terraform
AWS EKS / ECS
GitHub Actions
Jenkins
Prometheus
Grafana



PHASE 4 · CAPSTONE

SecureAI — End-to-End Secure AI Cloud Platform

Month 4

Business scenario: Deliver a complete, production-grade, secure AI cloud platform — an intelligent customer-support & analytics product that integrates everything you've built and meets the security bar real companies require before going live. This is your portfolio centrepiece.

WHAT YOU BUILD

- Integrate Projects 1–3 into one cohesive platform
- DevSecOps pipeline: image scanning, SAST/DAST, secrets scanning
- Cloud hardening: IAM least privilege, KMS encryption, WAF, secrets management
- LLM security guardrails, monitoring, logging & an incident-response plan

SKILLS DEMONSTRATED

- Full-stack AI-Cloud engineering
- DevSecOps & cloud security
- Architecture, integration & optimisation
- Production readiness end-to-end

Full AI/ML stack
Agentic AI
AWS (multi-service)
Kubernetes
Terraform
Trivy / Snyk
SonarQube

KMS / WAF / IAM

PLUS — MINI-PROJECTS EVERY SINGLE WEEK

Beyond the four flagship projects, each week ships a hands-on lab and a real-time scenario task. You graduate with a GitHub profile full of working code — not an empty repository.

TOOLS & TECHNOLOGIES

The complete **industry** toolkit.

You'll work with the same tools professional engineering teams use every day — across programming, data, AI, cloud, DevOps and security.

<p>Languages & Core</p> <p>Python · SQL · Bash · Git · GitHub · REST APIs · JSON · Linux</p>	<p>Data Science</p> <p>NumPy · Pandas · Matplotlib · Seaborn · Plotly · Streamlit · Jupyter</p>	<p>Machine Learning</p> <p>scikit-learn · XGBoost · LightGBM · Optuna · SHAP · MLflow</p>	<p>Deep Learning</p> <p>TensorFlow · Keras · PyTorch · CNNs · Transformers</p>
<p>Generative & Agentic AI</p> <p>LLM APIs · LangChain · Llamaindex · LangGraph · CrewAI · RAG</p>	<p>Vector & Backend</p> <p>FAISS · Chroma · Pinecone · FastAPI · Gradio · Embeddings</p>	<p>Cloud (AWS)</p> <p>EC2 · S3 · VPC · IAM · Lambda · RDS · DynamoDB · ECS · EKS · SageMaker · Bedrock</p>	<p>Multi-Cloud Awareness</p> <p>Azure & GCP service mapping · CloudFormation</p>
<p>Containers & Orchestration</p> <p>Docker · Docker Compose · Kubernetes · Helm · EKS</p>	<p>DevOps & IaC</p> <p>Terraform · Ansible · Jenkins · GitHub Actions · ArgoCD</p>	<p>Observability</p> <p>Prometheus · Grafana · ELK · CloudWatch · CloudTrail</p>	<p>Cyber Security & DevSecOps</p> <p>Nmap · Wireshark · Burp Suite · Trivy · Snyk · SonarQube · KMS · WAF</p>

PLACEMENT & CAREER SUPPORT

We don't stop until **you're hired.**

Technical skill gets you in the door — interview readiness gets you the offer. Career support is woven through the program and intensifies in the final phase, backed by our placement guarantee.

OUR COMMITMENT TO YOU

100% Placement Guarantee

Complete the program and meet the assessment criteria, and we back you with unlimited interview opportunities, continuous profile sharing with hiring partners and dedicated support — until you are placed.

100%

- 1 Portfolio engineering.** Polish your GitHub, write a technical project blog, and package your capstone so recruiters can see real, working proof of your skills.
- 2 ATS-optimised resume & LinkedIn.** A recruiter-friendly resume mapped to target roles, plus a LinkedIn profile that gets you found.

- 3 **Aptitude & communication.** Quantitative, logical and verbal aptitude practice, plus group discussions and spoken-English confidence.
- 4 **DSA & system-design refresher.** Coding-challenge practice and the system-design fundamentals that technical rounds expect.
- 5 **Mock interviews with feedback.** Repeated technical and HR mock rounds with engineers — recorded, reviewed and improved until you're sharp.
- 6 **Active placement drives.** Profile sharing with hiring partners, interview scheduling and ongoing support through the placement process.



In-Demand Salaries

AI, cloud and DevOps are among the highest-paid entry tracks in the Indian IT market — and demand keeps rising.



Growing Job Market

GenAI and cloud roles are expanding rapidly across product companies, startups and services firms.



Multiple Role Options

One program qualifies you for ML, GenAI, data, cloud, DevOps and security roles — you choose your direction.

ASSESSMENT & CERTIFICATION

Progress is measured through weekly hands-on tasks, phase assessments, project reviews and mock interviews. On successful completion you receive a **Cloud Soft Solutions Course Completion Certificate**, a job-ready project portfolio, and continued placement support.

ENROL TODAY

Your AI & Cloud career starts here.

Sixteen weeks. A world-class curriculum across eight in-demand domains. Four real projects. A 100% placement guarantee. One job-ready engineer — you. Seats are limited and batches fill quickly. Reach out to reserve your place or to request a detailed schedule, fee structure and the upcoming batch calendar.

What's included

- ✓ 16-week instructor-led program across 4 phases
- ✓ 4+ real-time, resume-ready projects + weekly labs
- ✓ Hands-on access to cloud, AI and DevOps tooling
- ✓ Course materials, recordings & doubt-clearing sessions
- ✓ 100% placement guarantee & lifetime career support

You should join if you

- ✓ Are a fresh graduate (any stream) wanting an IT career
- ✓ Want one structured path instead of scattered courses
- ✓ Learn best by building real things, not just watching
- ✓ Want serious, hands-on placement preparation

Talk to our admissions team

Call or message us for the next batch dates, fees and a personalised career roadmap. Our counsellors will help you choose the right starting point — no coding experience required.

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We reply within one business day

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Ameerpet, Hyderabad

Classroom & live-online batches

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