



Agentic AI Course Syllabus

Professional Industry-Oriented Training Program covering Python, AWS, Data Engineering, Machine Learning, LangChain, RAG & Agentic AI Development.

Course Overview

This course is designed for students, software professionals, data engineers, cloud engineers, and AI enthusiasts who want to build modern AI applications and Agentic AI systems using industry-standard tools and cloud platforms.

Course Duration	4 Months
Training Mode	Online + Classroom
Projects Included	Yes – Hands-on Industry Projects
Tools Covered	Python, AWS, Bedrock, LangChain, RAG
Suitable For	Freshers & Working Professionals

Module 1: Python for Data & AI Engineering

- Python fundamentals, data types, operators & loops
- Functions, OOP, Exception Handling
- File handling, APIs, Regex
- Pandas & NumPy
- Mini Data Transformation Project

Module 2: Cloud Computing & AWS

- AWS fundamentals & IAM
- Amazon S3, EC2, Lambda
- VPC, SNS, Step Functions
- CloudWatch Monitoring
- Hands-on AWS Labs

Module 3: Databases - SQL & DynamoDB

- SQL queries, joins & CTEs
- Window Functions & Indexes
- DynamoDB fundamentals
- CRUD operations & Streams
- Query optimization

Module 4: Data Engineering

- ETL vs ELT concepts
- Batch vs Streaming pipelines
- Data Lakehouse Architecture
- AWS Glue & Crawlers
- End-to-End Pipeline Project

Module 5: AI & Machine Learning on AWS

- Machine Learning fundamentals
- Amazon Bedrock & Foundation Models
- AWS AI Services
- Claude API integration
- Model evaluation concepts

Module 6: LangChain & Agentic AI

- LangChain Architecture
- RAG Pipelines

TECH CONCEPT HUB

- Vector Databases
- Agentic AI systems
- Live Agentic Chatbot Project

Career Opportunities After This Course:

- AI Engineer
- Data Engineer
- Cloud Engineer
- ML Engineer
- Generative AI Developer
- Agentic AI Developer

TECH CONCEPT HUB

Practical Technology Training Institute in Pune

Industry-oriented learning with hands-on projects and expert mentorship.