



NEXT
IT CAREER
• Moving minds to right place •

since
2017

GENERATIVE AI

(Gen AI)



Best Training and Placements Institute



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About Next IT Career

Next IT Career Best Software Coaching Center in Hyderabad Corporate training is a function of human resource management that aims to provide the organization's employees with the knowledge and skills required to be successful. In turn, the growth of employees also contributes to the success of the business. In recent years, its also seen as a long-term strategic assignment rather than a cost center for the organization. The majority of companies have embraced 'continual learning' in it to promote employee growth both professionally and personally and acquire a highly skilled workforce as a result.



Corporate Training



Classroom Training



Online Training

Why Choose Us?



**Training by
Certified Instructors**



Weekly Assignments



Project Training



Resume Preparation



Mock Interviews



**Interview cracking
tips**

Course Syllabus

Python Foundations for AI

- Python Essentials for AI Development

Machine Learning Fundamentals for NLP

- Structured Roadmap to Master NLP
- Real-World Applications of NLP
- Tokenization Concepts & Implementation
- Practical Tokenization Labs
- Text Preprocessing Techniques: Stemming with NLTK
- Lemmatization Strategies
- Stopword Filtering in NLP
- POS Tagging Using NLTK
- Named Entity Recognition (NER)
- Encoding Techniques: One-Hot Encoding
- Bag-of-Words (BoW) Model – Concepts & Practice
- Understanding N-Grams in NLP
- TF-IDF: Intuition & Use Cases
- Introduction to Word Embeddings
- Word2Vec: Theory & Applications
- **Hands-on Projects**

Deep Learning Techniques for NLP

- Fundamentals of Deep Learning for NLP
- Recurrent Neural Networks (RNN) – In-Depth Understanding
- Building Complete Projects with Simple RNNs
- Advanced RNN Architectures: LSTM and GRU
- Bidirectional RNN – Internal Mechanics
- Encoder-Decoder Architectures Explained
- Sequence-to-Sequence Learning in NLP
- Attention Mechanism – Theory & Code
- Introduction to Transformer Architectures

Generative AI and Large Language Models (LLMs)

- Foundations of Generative AI and LLM Ecosystem
- Getting Started with LangChain Framework
- LangChain & OpenAI Integration Overview
- Core Modules and Components in LangChain
- Using OpenAI & Ollama with LangChain
- LCEL (LangChain Expression Language) for LLM App Development
- Building Context-Aware Chatbots with LangChain
- Chatbots with Conversational Memory and Q&A Capability
- End-to-End Generative AI Chatbot Projects
- RAG-Based Document Q&A using GROQ API and LLaMA3
- Conversational Q&A on PDFs with Chat History
- Intelligent Search Engines with LangChain Tools & Agents
- **Hands-on Projects**

Advanced Integrations and Deployment

- LangChain + HuggingFace Integration
- PDF Query Systems with AstraDB and LangChain
- CodeLlama for Multilingual Code Generation Assistants
- Deployment Strategies: Streamlit & HuggingFace Spaces
- Implementing Gen AI Apps on AWS
- Real World Use Cases with crewAI Multi-Agent Architecture
- Hybrid Search RAG with Vector Databases + LangChain
- Introduction to Graph Databases and Cypher Query Language
- GraphDB Integration for LLM Applications
- Intuition & Implementation of LLM Fine-Tuning Techniques
- Fine-Tuning LLMs Using Lamini Platform
- Stateful & Multi-Agent Workflows using LangGraph

Module 2: Agentic AI & Autonomous AI Systems

Foundations of Agentic AI

- Introduction to AI Agents
- What is Agentic AI? Concepts and Scope
- Key Differences: AI Agents vs Agentic AI

Lang Graph: Building Agentic AI Systems

- Getting Started with LangGraph Framework
- Core Components and Workflow Patterns
- Debugging and Monitoring using LangSmith
- Exploring Various Workflow Architectures
- Human-in-the-Loop with LangGraph
- Retrieval-Augmented Generation (RAG) with LangGraph

Applied Agentic AI Projects

- End-to-End LangGraph Projects
- AI-Powered Chatbot with Live Web Search Capabilities
- Autonomous News Summarization Agent System
- Blog Generation Assistant using Agentic AI
- Leveraging Model Context Protocol in Agent Workflows

Our Other Courses

Trending Software Testing courses

Manual Testing 

Selenium Automation 

Tocsa 

ETL Testing 

Performance Testing 

API Testing 

Load runner 

J-meter 

Neo load 

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Our Infrastructure

