Agentic AI vs. Generative AI

| Agentic AI	Generative AI
Autonomous	Creative
Goal-Oriented	Output-Oriented
Real-time Environment	Content-Based
Utilize Tools and APIs	No external tools
Continuous Adaptation	No adaptation from real-time
Autonomous Systems	Content Creation
Independent Decision-Making	Make decision based on input patterns
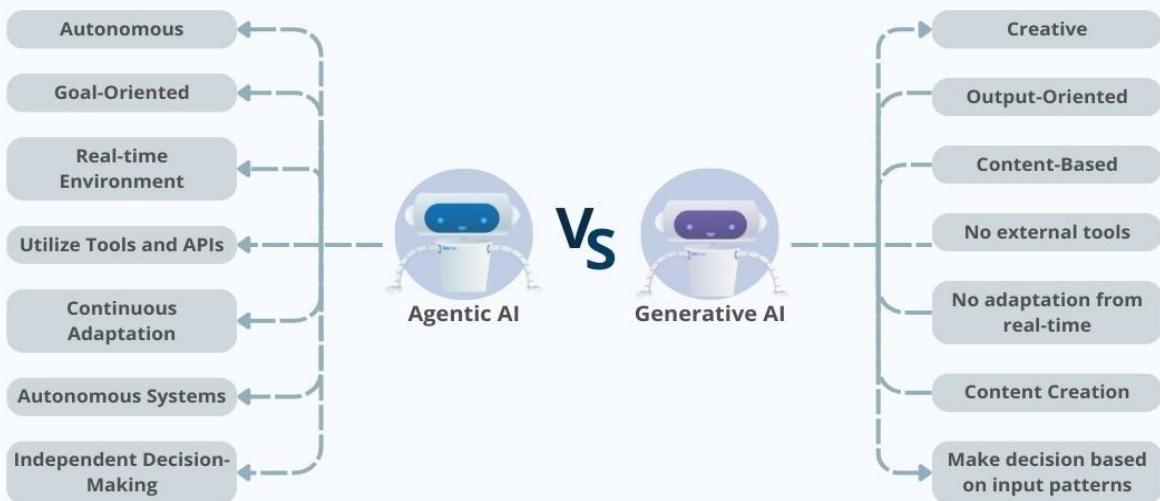
Overview

The **Gen AI & Agentic AI Training** at eMexo Technologies in Electronic City, Bangalore is designed for aspiring AI engineers, machine learning enthusiasts, and software professionals who want to master the skills required to build and deploy intelligent, autonomous AI-powered applications using **Generative and Agentic AI** techniques. This program covers all essential domains of modern AI, including **Large Language Models (LLMs)**, **GPT-based applications**, **Agentic AI frameworks**, **Transformer architectures**, **fine-tuning**, **prompt engineering**, **autonomous agent design**, **model deployment**, integration with cloud platforms, and collaboration with AI APIs. With a strong focus on real-world industry applications, you'll gain practical knowledge of developing scalable AI solutions and implementing end-to-end **Gen AI & Agentic AI pipelines** for diverse automation tasks. These skills prepare you not only for real-time AI projects but also for managing complete AI-driven workflows efficiently.

As a leading **Gen AI & Agentic AI Training Institute in Electronic City, Bangalore**, eMexo Technologies ensures a hands-on, project-based learning approach with live industry projects that mirror real corporate AI challenges. You'll learn how to design and implement intelligent agents, integrate AI solutions with cloud-based platforms, optimize performance, handle large datasets, generate meaningful outputs, and debug AI workflows effectively. The course also emphasizes best practices for **end-to-end Agentic AI model development**, including data preprocessing, multi-agent orchestration, evaluation techniques, and performance optimization. This comprehensive approach empowers you to take on challenging roles such as **Agentic AI Engineer**, **AI Automation Specialist**, or **AI Application Developer** upon course completion.

With expert trainers, a structured curriculum, personalized mentorship, and **100% placement assistance**, this program not only builds your technical skills but also ensures career advancement in one of the most in-demand areas of AI innovation. By the end of the course, you'll be fully equipped to design and execute **Gen AI & Agentic AI solutions** in production environments, collaborate with AI development teams, and deliver high-quality, AI-powered applications for real-world use cases. This makes it one of the **best-rated Gen AI & Agentic AI Courses in Electronic City, Bangalore**, a highly recommended **AI Training in Electronic City, Bangalore**, and the most trusted **AI Training Institute in Electronic City, Bangalore** designed to boost your career in AI, machine learning, and autonomous AI development.

Training Features

Real-life Case Studies

Do a real-life case study to understand the usage in real-world scenarios.

Assignments

Each class will be followed by a practical assignment switch that can be completed before the next class.

Preparation for interview

Our trainers are professionals working in multinational corporations. They are experts in their field and know exactly what the interviewer will look for in the candidate. Experienced trainers not only share interview questions but also conduct mock interviews to help prepare for the actual interview.

Key Features

eMexo Technologies offers the **Best Generative & Agentic AI Training in Electronic City Bangalore** with the **TOP industry expert trainers**.

Here are the key features.

- ★ Free Demo Class Available
- ★ Practical Approach
- ★ Expert & Certified Trainers
- ★ 100% Job Oriented Training
- ★ Real World use cases and Scenarios
- ★ Completed 500+ Batches
- ★ Certification Guidance

Generative & Agentic AI Course Syllabus

Module 1: Introduction to Generative & Agentic AI

- What is Generative AI?
- Evolution from Traditional AI → Generative AI → Agentic AI
- Key Concepts: Generative Models, Reasoning, Autonomy, Goal-driven AI
- Real-world Applications: ChatGPT, Copilot, Gemini, AutoGPT, ReAct Agents
- Overview of Large Language Models (LLMs)

Module 2: Foundation Models & LLM Architecture

- Transformer Architecture Deep Dive
- Tokenization, Embeddings, Attention Mechanism
- Understanding Model Parameters and Scaling Laws
- Fine-tuning vs. Prompt Engineering vs. RAG
- Popular Models: GPT, Llama, Mistral, Claude, Gemini

Module 3: Prompt Engineering & Generative Techniques

- Types of Prompts: Zero-shot, Few-shot, Chain-of-Thought
- Context Management and Role-based Prompting
- Structured Output Generation (JSON, SQL, HTML)
- Multi-turn Conversation Handling
- Prompt Optimization and Evaluation Metrics

Module 4: Generative AI for Text, Image & Code

- Text Generation: Summarization, Translation, Content Creation
- Image Generation: DALL·E,   Midjourney, Stable Diffusion
- Code Generation: GitHub Copilot, Code Llama, Replit AI
- Multi-modal Models: Gemini, GPT-4o, CLIP
- Hands-on Labs: Text & Image Generation Projects

Module 5: Agentic AI – Concepts & Frameworks

- What are AI Agents?
- Architecture: Planner, Memory, Tools, Feedback Loops
- Autonomous vs. Semi-Autonomous Agents
- Frameworks: LangChain, CrewAI, AutoGPT, ReAct, Semantic Kernel
- Designing Goal-Oriented AI Agents

Module 6: Building AI Agents (Hands-on)

- Tool Use: API Calling, Web Search, Knowledge Retrieval
- Integrating Memory and Context
- Multi-Agent Collaboration
- Task Planning and Decomposition
- Project: Multi-Agent Workflow System

Module 7: Retrieval-Augmented Generation (RAG)

- What is RAG and Why It's Needed
- Vector Databases (Pinecone, FAISS, Chroma)
- Document Chunking and Embeddings
- Enterprise Chatbot using RAG
- Project: Document-based AI Assistant

Module 8: Fine-Tuning and Custom Model Development

- Supervised Fine-Tuning (SFT)
- Parameter-Efficient Fine-Tuning (PEFT, LoRA)
- Dataset Preparation
- Model Evaluation & Deployment
- Project: Fine-tune an Open-source Model

Module 9: Integrations & Deployment

- APIs and Cloud Integration (OpenAI, Anthropic, Hugging Face)
- AI Web Apps with Streamlit / Gradio
- Tool Integration (Email, Slack, DBs)
- Containerization & Model Serving
- Deployment on AWS / Azure / GCP

Module 10: Responsible AI & Ethics

- Bias, Hallucination, and Transparency
- Privacy and Data Governance
- Human-AI Collaboration
- Safety Guardrails and Monitoring
- Future Trends: Agent Swarms, Self-improving Systems

Capstone Project

Students design and present a fully functional Agentic AI System such as:
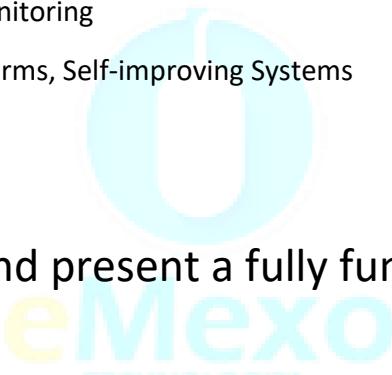
- Research Assistant Agent
- Business Report Generator
- Code Reviewer Agent
- Automated Marketing Content Creator
- AI Workflow Automation System