

## LangChain for Business

Course#: GEN AI-007

Duration: 4.5 hrs

Price: 399.00

### Course Description

Unleash the Power of Large Language Models with LangChain.

Embrace the next frontier of AI (Artificial Intelligence) development with LangChain, the groundbreaking framework that empowers you to harness the full potential of large language models (LLMs).

### Objectives

In this comprehensive course, you will master the art of building intelligent applications using LangChain, gaining hands-on experience in creating chatbots, question answering systems, and more.

### Audience

### Prerequisites

No prior experience with LLMs or LangChain is required. Whether you are a seasoned developer or a curious newcomer, this course will equip you with the skills and knowledge to become a LangChain expert

### Content

1. Introduction to LangChain
  - a) Introduction to LangChain
  - b) Evolution of LangChain
  - c) Importance in Business
  - d) Real-World Applications
  - e) LangChain vs. Traditional Language Models
  - f) Challenges and Solutions
  - g) Module Summary and Key takeaways

LAB: 1 Introduction to Langchain

## 2. Fundamentals of LangChain

- a) Understanding Nodes in LangChain
- b) The Concept of Chains
- c) Command Processing in LangChain
- d) Integration with Existing Systems
- e) Customizing LangChain for Business Needs
- f) LangChains Scalability
- g) h) Error Handling and Debugging in LangChain
- i) Extending LangChain with Custom Nodes
- j) Performance Optimization in LangChain
- k) LangChains Application in Different Industries
- l) Future Developments in LangChain
- m) Best Practices for Implementing LangChain
- n) Recap and Key Takeaways

LAB: 2 Prompting and Parsing

LAB: 3 Prompt Templating

## 3. Building Intelligent Systems

- a) Building Composable Pipelines with Chains
- b) Conversational Memory
- c) Retrieval Augmentation
- d) AI Agents

LAB: 4 Memory

LAB: 5 LangChain Chains

LAB: 6 Langchain Documents Loaders

LAB: 7 Langchain Agents

## 4. Implementing LangChain in Business Operations

- a) Introduction to Module 4
- b) Benefits of Implementing LangChain
- c) Steps for Successful Implementation
- d) Case Studies
- e) Best Practices
- f) Cultural Sensitivity
- g) Security and Compliance
- h) Training and Skill Development
- i) Monitoring and Continuous Improvement
- j) Challenges and Solutions
- k) Future Trends

LAB: 8 Vector DataBases and Advanced Retrieval

## 5. Case Studies and Best Practices

a) Insightful Journey: Understanding real-world implications and strategies behind successful LangChain implementations.

b) Diverse Industries: In-depth case studies from E-commerce, Financial Services, and Healthcare.

c) Learning Objectives: Gain insights into challenges and innovative approaches, and extract best practices for your own business applications.

d) Module Goal: Equip with practical knowledge and actionable insights for leveraging LangChain technology in business.

## 6. Course Wrap-up

a) Summary of Key Concepts

b) Case Studies Revisited

c) Practical Applications

d) Future of LangChain in Business

Project: Building Chat Bot with Langchain