



Certified ISO 9001:2015

GenAI and Agentic AI BootCamp



Table of Contents

About the Program	3

Key Highlights of the Program	4

Who is this Program Ideal for?	5

About AgileFever	5

AgileFever Advantages	7

Certificates	9

Program Outcomes	10

Learning Path	11

Program Curriculum	12

Career Assistance	28

Tools Covered	29

Projects	30

Certification Process	32

Reviews	33

About The Program

This 8-week Gen AI and Agentic AI Bootcamp is designed for Freshers, working professionals or experienced IT professionals who want to design, build, and deploy production-ready AI applications with a structured, hands-on learning.

You will work with Azure AI, Azure AI Foundry, LangGraph, MCP, CrewAI, RAG, and an industry-relevant AI technology stack while building intelligent applications, automating workflows, integrating enterprise systems, and solving real-world business problems through guided implementation.

Every module combines live instructor-led sessions, hands-on labs, real-world projects, and continuous mentor support. By the end of the bootcamp, you will have portfolio-ready AI projects, practical implementation experience, and the confidence to build enterprise-grade AI solutions.



Key Highlights Of The Program



Build and deploy enterprise-grade AI agents in a structured 8-week program



Automate workflows across development, testing, and operations



64+ hours of Live, hands-on training + 10 hours of self-paced foundation learning



Learn the complete AI development lifecycle: Architecture → Development → Deployment



Develop 10+ AI agent solutions using Azure AI and Azure AI Foundry



Get career guidance with Resume, LinkedIn, GitHub and Mock Interview Support



Execute a capstone project aligned with real business use cases



Build AI solutions that deliver real business value



Work within the Microsoft AI ecosystem used in enterprise environments

Who Is This Program Ideal For?

This course is for developers, AI enthusiasts, and product teams ready to build real-world AI agents.

✓ AI/ML Engineers

✓ Backend Engineers

✓ Data Scientists

✓ Developers

✓ Data Analysts

✓ Full Stack Developers

✓ Cloud Engineers

✓ Recent College Graduates

About Agilefever

AgileFever is a globally recognized, ISO-certified EdTech leader. We specialize in delivering live, career-defining training in emerging and enterprise-ready technologies — bridging the gap between what the industry demands and what available Talent.

Our brand name captures our essence:

- **Agile:** A reflection of our relentless focus on adaptability, speed, and evolution — the pillars of modern professional excellence.
- **Fever:** The intense energy and passion that drives our learners, trainers, and partners to stay ahead in a fast-moving tech landscape.
- **Together,** AgileFever represents a burning commitment to real-world, agile learning that powers future-ready careers.

We focus on three core pillars:

Certification Programs: Co-delivered with global certifying bodies like Microsoft, Scaled Agile, and Kanban University, ensuring credibility and global recognition.

Industry-Led Bootcamps: Designed in collaboration with top-tier practitioners and academic leaders, our bootcamps offer project-based learning aligned with real job roles.

Career Acceleration & Interview Prep: Including personalized coaching, mock interviews, and portfolio development to help learners land high-impact roles across industries.

Our Expertise - From Artificial Intelligence, Agentic AI, and Generative AI to Cloud, Cybersecurity, Project Management, and Agile methodologies, AgileFever offers a catalog of 200+ cutting-edge courses — all taught 100% live, supported by mentors, capstones, and real-world use cases.

Whether you're a corporate team looking to upskill at scale, or a new graduate preparing for your first role, our programs are built to deliver industry-readiness from Day 1.

Our Impact - With over 25,000 professionals trained and 1,000+ enterprise teams empowered, AgileFever is not just another EdTech company — we are a strategic capability partner to some of the world's most ambitious individuals and organizations.

We Deliver Trainings of



AgileFever Advantages

✔ **World-Class Faculty&Mentors**

Learn from top university professors (Caltech, Michigan State, IITs, UT Dallas) and seasoned FAANG professionals.

✔ **Industry-Backed, Job-Ready Curriculum**

Curriculum designed by experts from leading companies, focused on real-world applications, not just theory.

✔ **Fully Live, Instructor-Led Training**

Engage in 100% live sessions with instant doubt resolution and real-time interaction-no pre-recorded content.

✔ **Hands-On Learning With Projects & Labs**

Work on 10+ projects and multiple labs to build practical, job-ready skills.

✔ **Exclusive Lifetime Access**

Get lifetime access to updated course content, so your skills stay relevant long after training ends.

✔ **Private Peer Learning Community**

Join an exclusive network for collaboration, discussions, and professional growth.

✔ **Affordable Premium Education**

Gain top-tier training and mentorship at highly competitive pricing.

✔ **Mentorship From Industry Leaders**

Get personalized guidance from experts at Fortune 500 companies and fast-growing startups.

☑ **Career Coaching & Soft Skills Development**

- Personalized career coaching from certified professionals to align your goals with industry expectations
- Behavioral coaching to help you excel in HR and cultural fit interviews
- Multiple weekly office hours for ongoing support, doubt resolution, and expert guidance

☑ **Job Market Readiness & Visibility**

- Resume refinement with direct input from top recruiters to craft a standout profile
- Mock interviews conducted by real hiring managers to build interview confidence and readiness
- LinkedIn profile optimization to boost visibility and attract top opportunities



Certificates

Upon successful completion of the Gen and Agentic AI BootCamp, you will receive a Certificate of Completion from AgileFever. Additionally, you will be awarded certificates for all applicable modules within the program, recognizing your dedication, initiative, and commitment to advancing your expertise in AI. These certificates serve as a testament to your skills and growth as an AI professional.

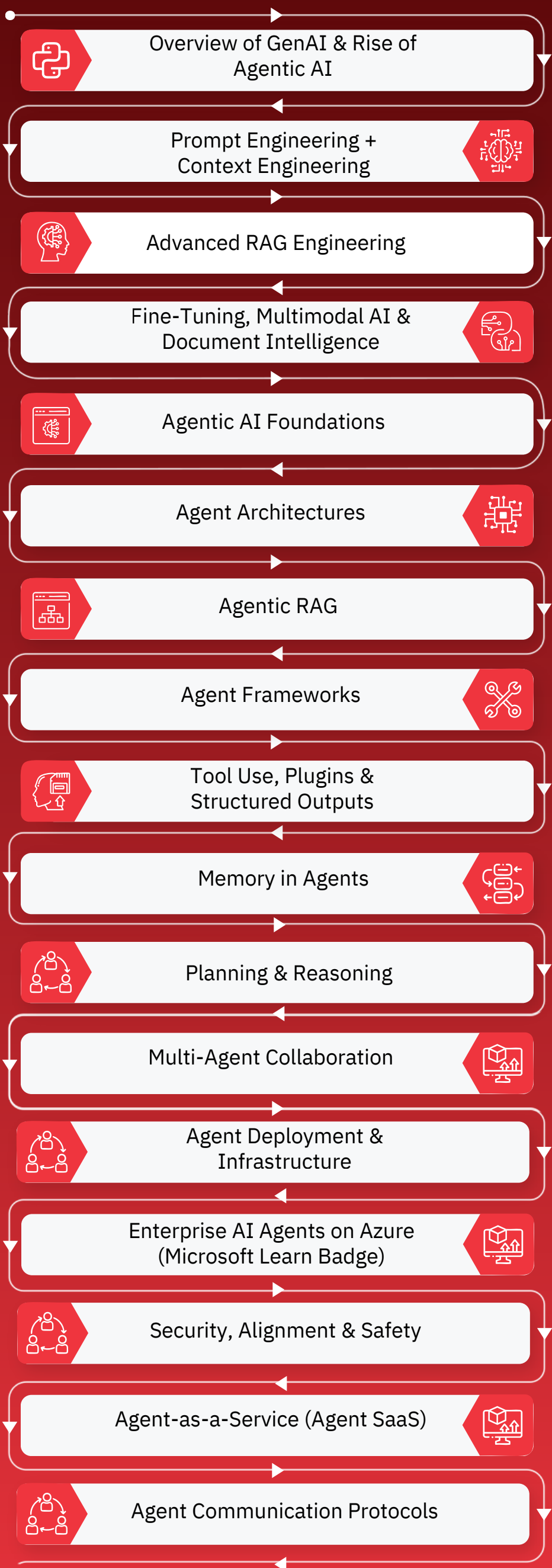


Program Outcomes

After completing this course, learners will be able to:

- ✔ Build intelligent AI agents from scratch using Python.
- ✔ Understand the full agent architecture and roles of each part.
- ✔ Choose and use frameworks like AutoGen and CrewAI to accelerate development.
- ✔ Using tools to fetch the data from the Internet and build some use cases.
- ✔ Create agents with persistent vector memory.
- ✔ Develop agents that dynamically adapt plans and tool usage.
- ✔ Design multi-agent systems with defined roles.
- ✔ Deploy scalable and maintainable agent applications.
- ✔ Implement safety constraints and perform ethical checks.
- ✔ Design agent SaaS applications for real-world use cases.
- ✔ Deliver a functional multi-agent system ready for practical application.

Learning Path



Program Curriculum

Module 1

Overview of GenAI and Rise of Agentic AI

- Introduction to Generative AI and Large Language Models
- Capabilities and Business Applications of GenAI
- Limitations and Challenges of Generative AI
- Introduction to Agentic AI Concepts and Architecture
- Evolution from GenAI to Autonomous Agentic Systems

Module 2

Prompt Engineering + Context Engineering

Topics

- Prompt Structure, CoT, ToT, ReAct, Few-Shot Prompting,
- Context Engineering
- Context Windows
- Context Compression
- Context Pruning
- Context Routing
- Context Budgeting
- Managing Large Contexts

Learning Objectives:

Should be able to understand how to write prompts for generating desired output from LLM

Module 3

Advanced RAG Engineering

Topics:

- Embeddings
- Chunking Strategies
- Vector Databases (FAISS, Pinecone, Weaviate)
- Hybrid Search
- Query Rewriting
- Multi-Query Retrieval
- Multi-Document Retrieval
- LangChain
- RAG Evaluation

Projects:

- **Enterprise Knowledge Intelligence Assistant:** Build a RAG system that can search, retrieve, and answer questions from multiple company documents using FAISS/Pinecone, LangChain, and LlamaIndex.
- **Agentic Research Assistant:** Build an agent that decides when to retrieve information, performs multiple retrieval loops, validates results, and generates research reports.

Module 4

Fine-Tuning, Multimodal AI & Document Intelligence

Topics:

- Fine-Tuning Fundamentals
- LoRA,
- QLoRA
- Dataset Preparation
- Fine-Tuning vs RAG
- Hugging Face Fine-Tuning Workflow
- GPT-4o Vision
- Claude Vision
- OCR
- PDF Extraction
- Invoice Processing
- Resume Parsing
- Contract Analysis
- Document Intelligence Agents

Projects:

Document Intelligence Agent: Upload PDFs, invoices, resumes, and contracts. Extract structured information and answer questions using Vision + OCR + LLMs.

Custom Domain AI Assistant: Fine-tune a small model using LoRA/QLoRA on domain-specific data and compare performance against a RAG-based approach.

Module 5

Agentic AI Foundations

Topics:

- What is an AI Agent?
- LLM as reasoning engines
- Planner, Executor, Tools, and Memory

Learning Outcomes:

- Introduce the concept and components of AI agents.

Use Cases/Projects:

- Understand the agent architecture and roles of each part.

Learning Objectives:

- Create a rule-based planning agent with memory.

Assessment Methods:

- Short quiz + code implementation.

Module 6

Agent Architectures

Topics:

- AutoGPT, BabyAGI, LangGraph overview, Crew AI framework ReAct, Plan-and-Execute, Tree of Thought
- Goal decomposition and task queues

Learning Outcomes:

- Explore agentic frameworks and architecture patterns.

Use Cases/Projects:

- Able to choose and use frameworks like AutoGen and CrewAI.

Learning Objectives:

- Build a simple CrewAI or LangGraph agent pipeline.

Assessment Methods:

- Demo and code walk through.

Module 7

Agentic RAG

Topics:

- Agentic RAG
- Langgraph
- web search
- tool
- vectorDB

Module 8

Agent Frameworks

Topics:

- CrewAI Framework
- AutoGen Framework
- LangGraph Framework
- Agent Orchestration Patterns
- Framework Comparison and Selection

Learning Outcomes:

- Learn about different Frameworks

Learning Objectives:

- Able to create use cases on different framework

Module 9

Tool Use, Plugins & Structured Outputs

Topics:

- API Calling
- Browser Tools
- File System Operations
- Function Calling
- Structured Outputs
- JSON Mode
- Pydantic Validation
- Output Parsers
- Retry Strategies
- Reliable Agent Responses

Learning Objectives:

- Enable agents to interact with external tools and services.

Learning Outcomes:

- Agents can fetch, read, write, and manipulate data.

Use Cases/Projects:

- Build an agent that queries web APIs and updates documents.

Assessment Methods:

- Code demo and test scenarios.

Module 10

Memory in Agents

Topics:

- Short-Term Memory
- Long-Term Memory
- Vector Memory
- FAISS
- Pinecone
- LangGraph Memory Persistence
- Context Retention Strategies

Learning Objectives:

- Implement agent memory for enhanced context.

Learning Outcomes:

- Create agents with persistent vector memory.

Use Cases/Projects:

- Create a chatbot with persistent user memory.

Assessment Methods:

- Functionality demonstration with memory storage.

Module 11

Planning & Reasoning

Topics:

- Multi-Step Planning
- ReAct Planning
- Dynamic Tool Chaining
- Decision Making Under Constraints
- Goal-Oriented Agents

Learning Objectives:

- Enable agents to reason and plan across multiple steps.

Learning Outcomes:

- Agents can dynamically adapt plans and tool usage.

Use Cases/Projects:

- Build a goal-seeking assistant with dynamic steps.

Assessment Methods:

- Step-by-step task execution assessment.

Module 12

Multi-Agent Collaboration

Topics:

- CrewAI
- AutoGen C
- AMEL
- Role-Based Orchestration
- Agent Negotiation
- Message Passing
- Collaborative Agent Systems

Learning Objectives:

- Introduce agents that collaborate and negotiate.

Learning Outcomes:

- Design multi-agent systems with defined roles.

Use Cases/Projects:

- Create buyer-seller agents that simulate transactions.

Assessment Methods:

- Group demo with inter-agent communication.

Module 13

Agent Deployment & Infrastructure

Topics:

- Dockerizing and deploying agents
- Hugging Face Spaces
- AWS Lambda
- GCP Deployment
- LLMOps Basics
- Deployment Strategies
- Production Readiness

Learning Objectives:

- Deploy agents in production-ready infrastructure.

Learning Outcomes:

- Deploy scalable and maintainable agent applications.

Use Cases/Projects:

- Deploy a LangGraph agent on HF Spaces with Docker.

Assessment Methods:

- Deployment report and live link submission.

Module 14

Enterprise AI Agents on Azure (Microsoft Learn Badge)

What You'll Achieve:

- Build AI agents using Azure AI Studio (AI Foundry)
- Deploy production-ready agent systems on cloud infrastructure
- Implement enterprise-grade RAG using Azure AI Search
- Understand how large organizations design AI agent workflows
- Complete a Microsoft Learn Applied Skills badge as part of the program

What You'll Learn:

- Azure AI Foundations
- Setting up Azure AI Studio and environments
- Understanding Azure OpenAI services Agent Development on Azure
- Building agents using Azure-native tools Orchestrating workflows with Semantic Kernel
- Enterprise RAG Systems
- Connecting agents to business data using Azure AI Search
- Designing knowledge-driven AI systems
- Deployment & Scaling
- Deploying agents on Azure cloud
- Monitoring, logging, and performance
- optimization
- Cost & Practical Usage
- Using Azure free credits efficiently Avoiding unnecessary API costs

Hands-On:

- Build an enterprise knowledge assistant (RAG-based agent)
- Deploy an AI workflow automation agent on Azure
- Convert your existing agent (CrewAI/LangGraph) into a cloud system
- Complete Microsoft Learn labs with instructor guidance

Microsoft Learn Badge (Applied Skills):

As part of this module:

- You will complete a Microsoft Learn AI Agents course on Azure
- Get step-by-step guidance to finish all required labs
- Use Azure free credits to complete the tasks
- Upon successful completion, you will receive an official Microsoft Learn Applied Skills badge directly from Microsoft

Module 15

Security, Alignment & Safety

Topics:

- Loop prevention and constraint design
- Goal alignment and ethical agents
- Trust boundaries and permission control
- Agent Governance
- Practical prompt injection defense — input sanitization, output filtering, tool permission scoping, sandboxing agent actions

Learning Objectives:

- Ensure safe, ethical, and aligned agent behaviors.

Learning Outcomes:

- Able to implement safety constraints and ethical checks.

Use Cases/Projects:

- Implement constraints in a goal-chasing agent.

Assessment Methods:

- Checklist-based review + discussion.

Module 16

Agent-as-a-Service (Agent SaaS)

Topics:

- Monetizable Agents,
- Travel Planner Agent,
- Sales Bot, Scheduling,
- Persistent Jobs,
- Dashboards,
- SaaS Business Models

Learning Objectives:

- Productize agents and offer as commercial services.

Learning Outcomes:

- Design agent SaaS apps for real-world use cases.

Use Cases/Projects:

- Build and price a travel planning SaaS agent.

Assessment Methods:

- Business model presentation + prototype demo.

Module 17

Agent Communication Protocols

Topics:

- Introduction to MCP (Multi-Agent Communication Protocols) Understanding A2A (Agent-to-Agent) Protocol •
- Deep Dive into ACP (Agent Collaboration Protocol)
- Comparing MCP vs A2A vs ACP
- When and how to apply each protocol in real-world agent systems
- Communication Patterns,
- Collaboration Workflows

Learning Objectives:

- Understand the core principles and differences between MCP, A2A, and ACP protocols.
- Learn when and how to apply each protocol in real-world multi-agent systems.
- Gain practical exposure to implementing these protocols using frameworks like AutoGen and CrewAI.

Learning Outcomes:

- Ability to design and implement agent communication using MCP, A2A, and ACP.
- Confidently choose the right protocol based on system requirements and agent behavior.
- Deliver functional multi-agent workflows with appropriate communication and collaboration logic.

Module 18

n8n(Recorded Module)

- n8n overview, architecture, and core concepts
- Workflow creation using triggers, nodes, and executions
- Data handling with JSON, expressions, conditions, and errors
- Integrations with APIs, databases, and third-party tools
- Advanced workflows, AI agents, deployment, and best practices

Career Assistance

■ **AI- Powered Resume & Profile Building**

Your resume, LinkedIn, and GitHub — optimized by industry professionals to stand out to recruiters and land interviews faster.

■ **Mock Interviews**

Practice real technical and behavioural interviews with honest feedback from people who actually hire for AI roles.

■ **1:1 Career Mentoring**

Work directly with industry veterans to position yourself for AI roles — covering job search strategy, communication, and career planning.

■ **Hiring Exposure**

Get direct visibility with active hiring managers. Understand what they actually look for — and how to stand out in competitive AI hiring pipelines.

Tools Covered

Gain hands-on experience with leading tools:



Visual Studio Code



Google Antigravity



OpenAI



Gemini



LangChain



LangGraph

crewai



Ollama

FAISS
(FACEBOOK AI SIMILARITY SEARCH)



n8n



Streamlit



GitHub Copilot



LangSmith



docker.



Hugging Face



Guardrails AI



Azure AI Foundry



Render



Google
colab

Projects

Build your portfolio with practical, end-to-end projects:

- ✓ **Python Mini Project:** Function chaining and data parsing
- ✓ **Rule-Based Planning Agent:** With memory integration
- ✓ **CrewAI/LangGraph Pipeline:** Build an agent pipeline
- ✓ **API-Driven Agents:** Query APIs, update documents
- ✓ **Chatbot with Memory:** Persistent user context with vector storage
- ✓ **Goal-Seeking Assistant:** Dynamic planning and tool chaining
- ✓ **Multi-Agent Simulation:** Buyer-seller transaction using message passing
- ✓ **Cloud-Deployed Agent:** Dockerized deployment to HuggingFace Spaces
- ✓ **Goal-Chasing Agent with Safety Checks:** Ethical agent design
- ✓ **Agent-as-a-Service (SaaS):** Travel planner or sales bot with pricing models
- ✓ **Enterprise Knowledge Intelligence Assistant:** Build a RAG system that can search, retrieve, and answer questions from multiple company documents using FAISS/Pinecone, LangChain, and LlamaIndex.
- ✓ **Agentic Research Assistant:** Build an agent that decides when to retrieve information, performs multiple retrieval loops, validates results, and generates research reports.
- ✓ **Document Intelligence Agent:** Upload PDFs, invoices, resumes, and contracts. Extract structured information and answer questions using Vision + OCR + LLMs.
- ✓ **Custom Domain AI Assistant:** Fine-tune a small model using LoRA/QLoRA on domain-specific data and compare performance against a RAG-based approach.

✓ **Capstone Project:**

Use Case 1: Go-to-Market Strategy for a New Energy Drink using Agentic AI

Objective: To effectively position and launch a new energy drink in a competitive market by leveraging autonomous agents for market intelligence and strategic planning.
(or)

Use Case 2: Multi-Agents AI for Product Launch Strategy

Objective: A beverage company is preparing to launch a new energy drink. Success depends on understanding market trends, identifying consumer preferences, and creating a compelling product positioning strategy.

Certification Process

Candidates can register and complete to this program in 4 simple steps:

STEP 1

Register for the Program

Enroll in the Gen and Agentic AI BootCamp

STEP 2

Attend and Complete the Training

Attend all live session sand complete the course curriculum

STEP 3

Complete the Capstone Project

Apply your learning in a hands-on project to demonstrate your practical skills

STEP 4

Receive Course Completion Certificate

Upon successful completion, receive an industry-recognized certificate from AgileFever

Pre-requisites:

No prior experience in Agentic AI is required. However, to ensure everyone starts with the same foundation, participants must complete the following:

- **Python for AI Fundamentals (6 Hours)**
 - Covers essential Python concepts used in AI applications, automation workflows, and agent development. This should be completed before the training begins.
- **n8n Automation Fundamentals (4 Hours)**
 - Introduces workflow automation, integrations, triggers, and AI-powered automation using n8n. After completing the program, participants will receive access to recordings, and learning materials will be provided for self-paced learning.
- **Note: These foundational topics will not be covered during the live training and are essential for participating in hands-on labs and agent-building exercises.**

Exam Details

There is no exam for this Gen AI and Agentic AI bootcamp. Completion of the capstone project serves as the final evaluation for the program.

REVIEWS



As a Data Scientist, I joined AgileFever's Agentic AI Bootcamp to strengthen my practical understanding of Agentic AI and prepare for the next stage of my career after a professional break. The learning was hands-on, practical, and focused on real-world AI implementation. It helped me sharpen my skills, improve confidence, and stay aligned with industry trends. Soon after, I transitioned into a Staff Data Scientist opportunity at Altimetrik

(~₹40 LPA from ~₹27 LPA). Highly recommended for experienced professionals looking to stay ahead in AI.



Deepak Gotrala
Learner



I had a great learning experience with my AI instructor, who demonstrated deep expertise in Agentic AI and made complex topics easy to understand. He was always supportive in resolving doubts and guiding us throughout the course.

I would also like to thank Agile Fever for providing this opportunity and organizing such valuable training sessions. I highly recommend anyone to get training from Agile Fever.



jahnavi j
Learner



I took the Agentic AI Bootcamp at Agile Fever and had a great experience. The sessions were well-structured, practical, and focused on real-world applications of agentic AI. The instructor explained concepts clearly and provided hands-on guidance throughout.



gayathri d
Learner



I recently completed the Agentic AI BootCamp by AgileFever, and it was an incredibly valuable learning experience.

The course provides a well-structured and practical approach to understanding Agentic AI systems. I particularly appreciated how it covered not just theory, but real-world implementation aspects like multi-agent orchestration, memory, reasoning, and tool integration. The hands-on exposure to cloud deployment and low-code/no-code automation workflows made the concepts much easier to grasp and apply.

One of the standout aspects of the program was the capstone project, which helped reinforce learning by applying concepts in a real-world scenario. The content is highly relevant for professionals looking to transition into or deepen their expertise in Generative AI and autonomous agents.

Overall, this bootcamp is a great choice for anyone interested in building intelligent, scalable AI systems. Highly recommended for both beginners and experienced professionals aiming to stay ahead in the evolving AI landscape.



Bhargavi Dutt Jawalkar
Learner



I just completed the Agentic AI Bootcamp by AgileFever and highly recommend it to anyone serious about understanding agentic AI systems. The content quality is excellent, current, relevant, and clearly built by people who know this space deeply.

Like most courses in this fast-moving field, the organization isn't always perfect, but that's a minor trade-off for the quality of knowledge you gain. AI is evolving faster than anyone can neatly package it, and this course keeps up where it counts. If you want to stay ahead in agentic AI, this bootcamp is well worth your time.



Candi Westin
Learner



AgileFever

United States

Agilefever Americas, Inc.
13107, Risen Star Road, Frisco, Texas,
75035 United States
Email us at: training@agilefever.com
Call us at: +1 833 316 6368

Australia

AgileFever LLC
Unit 12/19-21 Veron, St. Wentworthville
NSW 2145, Australia
Email us at: training@agilefever.com

INDIA

AgileFever India Hyderabad – 500001
Telangana India Email us at:
training@agilefever.com
Call us at: +91 8147084070

www.agilefever.com