

AWS-AAIF: Agentic AI Foundations

Overview

This one-day Agentic AI Foundations course guides you through building autonomous, goal-driven AI agents using AWS technologies.

What will you get out of this course:

- Understand how Agentic AI differs from traditional conversational systems
- Explore tools such as Amazon Q, Kiro, and Amazon Bedrock Agents/AgentCore
- Learn design patterns, architectural strategies, and observability practices for agent systems

Course Objectives

In this course, you will learn to:

- Summarize the evolution of Agentic AI and define what makes something “agentic”
- Identify core components of agentic systems
- Distinguish between workflow, autonomous, and hybrid agents
- Compare AWS service options for Agentic AI
- Describe capabilities and use cases of Amazon Q Developer, Amazon Q Business, and Kiro

Learning Outcomes

By the end of the course, you will be able to:

- Distinguish between workflow, autonomous, and hybrid agents
- Select suitable AWS services for agent development
- Develop basic implementation patterns and interoperability strategies
- Explain how to monitor, optimize, and scale agentic systems

AWS-AAIF: Agentic AI Foundations

Duration

1 Day

Target Audience

- Software developers new to Agentic AI seeking foundational knowledge
- Technical professionals exploring AI capabilities and interested in core components and applications of agentic AI
- Development teams evaluating Agentic AI solutions and needing to differentiate between agent types
- AWS Users expanding into Agentic AI, including current users of Amazon Q Developer, Amazon Q Business, and Amazon Bedrock Agents

AWS-AAIF: Agentic AI Foundations

OUTLINE

Time	Module	Topic Coverage
8:30AM – 9:00AM	Registration	-
9:00AM – 10:30 AM	Module 1: From LLMs to Agents	- Understanding Large Language Models (LLMs) - Innovations powering agents - Evolution timeline from LLMs to Agents
	Module 2: Exploring Agentic AI	- Understanding Agentic AI - Types of AI agents - Agentic AI applications
10:30AM – 10.45 AM	Tea Break	-
10:45AM – 12:30 PM	Module 3: Understanding Agentic AI Workflow	- Workflow patterns - Amazon Bedrock flows overview
	Module 4: Introducing Autonomous Agents	- How Autonomous Agents work - ReAct - ReWoo - Multi-agent collaboration - AWS Agentic AI solutions
12.30PM – 1:30 PM	Lunch Break	-
1.30PM – 3:30PM	Module 5: Amazon Q and Agentic Development Tools	- Amazon Q Developer - Amazon Q Business - Amazon Q in AWS Services - Kiro: AI-powered IDE with spec-driven development
	Module 6: Agentic AI with Amazon Bedrock	- Amazon Bedrock Agents - Amazon Bedrock AgentCore - Hands-on lab: Explore Amazon Bedrock Agents integrated with Amazon Bedrock Knowledge Bases and Amazon Bedrock Guardrails
3:30PM – 3:45PM	Tea Break	-
3:45PM – 5:00PM	Module 7: Building DIY Solutions	- DIY solutions - Observability and Monitoring - Agent Interoperability
	Module 8: Course Wrap-up	- Next steps and additional resources - Course summary