

## Agentic AI Foundations

**Duration: 1 Day**    **Course Code: GK910031**    **Version: 1.1.9**    **Delivery Method: Virtual Classroom**

### Overview:

**In this course, you'll explore the core principles and strategies for designing agentic AI systems using AWS services.**

You'll learn how agentic AI differs from traditional conversational systems. You'll also discover how to use tools like Amazon Q Developer, Amazon Quick Suite, Kiro, Strands Agents SDK, and Amazon Bedrock AgentCore to build autonomous, goal-driven solutions that solve real-world problems.

- Course level: Fundamental
- Duration: 1 day

*Updated August 2026*

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

### Target Audience:

#### **This course is intended for:**

- 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 Quick Suite, and Amazon Bedrock AgentCore

### Objectives:

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| <ul style="list-style-type: none"><li>■ <b>After this course participants should be able to:</b></li><li>■ Summarize the evolution of agentic AI and define what makes something agentic</li><li>■ Identify core components of agentic systems</li><li>■ Distinguish between workflow, autonomous, and hybrid agents</li><li>■ Identify basic implementation patterns for agentic AI</li><li>■ Compare AWS service options for agentic AI</li></ul> | <ul style="list-style-type: none"><li>■ Describe capabilities and use cases of Amazon Quick Suite, Amazon Q Developer, and Kiro</li><li>■ Explain Strands Agents framework and its applications</li><li>■ Build and customize a basic AI agent using Strands Agents SDK</li><li>■ Develop a simple task-specific agent for real-world application using Strands Agents SDK</li><li>■ Explain Amazon Bedrock AgentCore</li><li>■ Describe observability and interoperability patterns for production agentic AI systems</li></ul> |
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### Prerequisites:

#### **We recommend that attendees of this course have:**

- Generative AI Essentials or equivalent work experience
- Basic AWS knowledge and software development experience
- GK4501 - AWS Technical Essentials
- GK910027 - Generative AI Essentials on AWS

### Testing and Certification

None

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## Follow-on-Courses:

The following courses are recommended for further learning and development:

- GK910010 - Developing Generative AI applications on AWS

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## Content:

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| Day 1                                                                                                                         | Module 3: Understanding Agentic AI Workflows                                                                                                                                                                                                         | Module 6: Building Custom Solutions                                                                |
| Module 1: From LLMs to Agents                                                                                                 | ■ Workflow patterns<br>■ Amazon Bedrock flows overview                                                                                                                                                                                               | ■ Customizing agentic infrastructure<br>■ Observability and monitoring<br>■ Agent interoperability |
| ■ Limitations of Large Language Models (LLMs)<br>■ Innovations powering agents<br>■ Evolution from LLMs to agentic AI systems | Module 4: AWS Agentic Development and Productivity Tools                                                                                                                                                                                             | Module 7: Course Wrap-up                                                                           |
| Module 2: Exploring Agentic AI                                                                                                | ■ AWS agentic AI solutions<br>■ Amazon Quick Suite<br>■ Amazon Q Developer<br>■ Hands-on lab: Accelerating software development using Amazon Q Developer<br>■ Kiro: AI-powered integrated development environment (IDE) with spec-driven development | ■ Next steps and additional resources<br>■ Course summary                                          |
| ■ Understanding agentic AI<br>■ Types of AI agents<br>■ Agentic AI applications                                               | Module 5: Implementing agentic AI Frameworks with Amazon Bedrock AgentCore                                                                                                                                                                           |                                                                                                    |
|                                                                                                                               | ■ Agentic AI frameworks<br>■ Hands-on lab: Getting started with Strands Agents<br>■ Amazon Bedrock AgentCore                                                                                                                                         |                                                                                                    |

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## Additional Information:

### Activities :

This course includes presentations, hands-on labs, and group exercises.

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## Further Information:

For More information, or to book your course, please call us on 00 966 92000 9278

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