Building Advanced Agentic Systems on AWS

Category: AI, Data & Analytics | **Vendor:** Amazon Web Services

Duration: 8.00 hours (1 days) **6.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

In this course, you'll learn about implementing production-ready multi-agent systems using Amazon Bedrock AgentCore, covering mulit-agent patterns, context optimization techniques, security configurations, and monitoring frameworks. You will examine the skills needed to move beyond proof-of-concept to scalable, secure, and observable agentic AI implementations. The course prepares you to design and deploy advanced agentic systems ready for real-world production environment.

About This Course

Module 1: Multi-Agent Architecture and Communications Patterns

- Single agent limitations and multi-agent benefits
- Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and AgentCore - Task 1: Building a Personal Budget Assistant with Strands Agents
- Multi-agent communication patterns
- Memory and state management
- Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and AgentCore - Task 2: Building a Multi-Agent System for Complex Financial Analysis

Module 2: Context Engineering and Performance Optimization

- Context as finite resource
- Context optimization techniques
- Tool design for context efficiency

Module 3: Security and Compliance Implementation

- Production Identity and Access Management
- VPC integration and network security

Module 4: Production Monitoring, Observability, and Evaluation

- Monitoring architecture
- AgentCore evaluation
- Enterprise observability integration
- Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and AgentCore - Task 3: Deploying Production-Ready Agents with Amazon Bedrock AgentCore

Module 5: Well-Architected Agentic AI Systems

- Applying the Well-Architected framework
- Well-Architected deployment

- Production readiness

Module 6: Course Wrap-up

- Next steps and additional resources
- Course summary

Who Should Attend

Agentic AI Foundations

Building Agentic AI with Amazon Bedrock AgentCore

Prerequisites & Entry Requirements

General Prerequisites:

We recommend that attendees of this course have:

- Agentic AI Foundations (AAIF)
- Building Agentic AI with Amazon Bedrock AgentCore (BAIABA)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

In this course, learners will:

- Analyze scenarios that require multi-agent architectures.
- Describe primary multi-agent communication patterns and their use cases.
- Configure agent-as-tool patterns for production deployments.
- Implement memory sharing using available platform capabilities.
- Implement context management strategies for production workloads.
- Design context compression and optimization mechanisms.
- Optimize resource usage and cost management across multi-agent systems.
- Configure policy-based access control using AgentCore Policy Engine.
- Implement VPC integration for secure agent deployments.
- Implement distributed tracing and monitoring across multi-agent systems.
- Establish comprehensive agent evaluation frameworks.
- Configure integration patterns for enterprise observability systems
- Establish comprehensive audit trails and compliance monitoring.
- Integrate agentic systems with production APIs and services.
- Design deployment strategies for production environments.
- Assess production readiness and establish continuous improvement processes.

Detailed Course Outline

Multi-Agent Architecture and Communications Patterns

Single agent limitations and multi-agent benefits

Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and

AgentCore - Task 1: Building a Personal Budget Assistant with Strands Agents

Multi-agent communication patterns

Memory and state management

Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and

AgentCore - Task 2: Building a Multi-Agent System for Complex Financial Analysis

Instructor Demonstration: Building and Deploying Intelligent Financial Agents with Amazon Bedrock Strands and AgentCore

Skills You Will Learn:

In this course, learners will:

- Analyze scenarios that require multi-agent architectures.
- Describe primary multi-agent communication patterns and their use cases.
- Configure agent-as-tool patterns for production deployments.
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Frequently Asked Questions

Q: What delivery options are available for Building Advanced Agentic Systems on AWS?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 1-day Building Advanced Agentic Systems on AWS course provides up to 6.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Building Advanced Agentic Systems on AWS training?

The training takes place over 1 day(s), with each day lasting approximately 8.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Building Advanced Agentic Systems on AWS?

Yes, we provide corporate training, dedicated training, and closed classes for Building Advanced Agentic Systems on AWS. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Building Advanced Agentic Systems on AWS, Machine Learning, BAAS, Amazon Web Services, vILT

Q: Why choose Nexus Human for Building Advanced Agentic Systems on AWS?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Building Advanced Agentic Systems on AWS training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

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