

Advanced Generative AI Development on AWS (AGAID)

ID AGAID **Price** CHF 1,995.—(excl. VAT) **Duration** 3 days

Who should attend

- Software developers
- Technical Professionals

This course is part of the following Certifications

AWS Certified Generative AI Developer – Professional (GAIDP)

Prerequisites

- AWS Technical Essentials
- Generative AI Essentials on AWS
- 2 or more years of experience building production grade applications on AWS or with open-source technologies, general AI/ML or data engineering experience
- 1 year of hands-on experience implementing generative AI solutions

Course Objectives

- Develop production-ready generative AI solutions using AWS services that meet enterprise requirements for security, scalability, and reliability
- Evaluate and select appropriate foundation models for specific business use cases, including benchmarking performance and implementing dynamic model selection architectures
- Design and implement resilient foundation model systems with circuit breakers, cross-region deployment, and graceful degradation strategies
- Build comprehensive data processing pipelines for multi-modal inputs, including validation workflows and optimization techniques
- Implement sophisticated vector database solutions using Amazon Bedrock Knowledge Bases, OpenSearch, and hybrid approaches for effective retrieval augmentation
- Create and manage advanced prompt engineering frameworks, including chain-of-thought reasoning and enterprise-wide prompt governance systems
- Develop autonomous AI agents using Amazon Bedrock Agents, implementing complex reasoning patterns and tool integration capabilities
- Implement comprehensive AI safety and security controls, including content filtering, privacy preservation, and

- adversarial testing mechanisms
- Optimize performance and manage costs through token efficiency strategies, batching implementations, and intelligent caching systems
- Design and implement comprehensive monitoring and observability solutions for foundation model applications
- Create systematic testing and validation frameworks for continuous quality assurance of AI applications
- Integrate generative AI solutions within enterprise environments using secure, compliant, and scalable architectural patterns

Training Centres worldwide



Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, <https://www.flane.ch>