

SAP BTP AI Foundation & Generative AI Hub

COURSE CONTENT

GET IN TOUCH



Multisoft Systems
B - 125, Sector - 2, Noida



(+91) 9810-306-956



info@multosoftsystems.com



www.multosoftsystems.com

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with leading technologies to bring world-class one-on-one and certification training. Intending to empower professionals and businesses across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training, a comprehensive learning solution with lifetime e-learning access, after-training support and globally recognized training certificates.

About Course

SAP BTP AI Foundation & Generative AI Hub Training by Multisoft Systems provides practical knowledge of implementing enterprise generative AI capabilities within the SAP BTP ecosystem. The course covers SAP AI Core, SAP AI Launchpad, Generative AI Hub, foundation models, prompt engineering, orchestration, grounding, RAG, APIs, application integration, security, and responsible AI. Through technical concepts, hands-on exercises, and enterprise use cases, participants gain the skills required to work with AI-powered solutions across SAP environments.

Module 1: Introduction to SAP BTP and Business AI

- ✓ Overview of SAP Business Technology Platform
- ✓ SAP BTP architecture and service landscape
- ✓ Introduction to SAP Business AI
- ✓ Role of AI within SAP's enterprise ecosystem
- ✓ Traditional AI vs. generative AI
- ✓ AI capabilities across SAP applications
- ✓ Enterprise AI scenarios and adoption considerations
- ✓ Introduction to SAP BTP AI services

Module 2: SAP BTP AI Foundation Architecture

- ✓ Introduction to AI Foundation on SAP BTP
- ✓ AI Foundation capabilities and components
- ✓ Architecture and service interaction
- ✓ AI lifecycle within SAP BTP
- ✓ AI Foundation services and development landscape
- ✓ Interaction with SAP applications and business data
- ✓ AI workloads and runtime considerations
- ✓ Understanding AI service consumption
- ✓ Enterprise AI architecture patterns

Module 3: SAP AI Core Fundamentals

- ✓ Introduction to SAP AI Core
- ✓ Role of SAP AI Core in the AI lifecycle

- ✓ AI Core architecture and concepts
- ✓ Resource groups and workload isolation
- ✓ Configurations and executions
- ✓ AI scenarios
- ✓ Serving AI models
- ✓ Deployments and endpoints
- ✓ Working with AI Core APIs
- ✓ Managing AI workloads
- ✓ Execution and deployment lifecycle
- ✓ Monitoring AI Core resources
- ✓ Troubleshooting common deployment issues

Module 4: SAP AI Launchpad

- ✓ Introduction to SAP AI Launchpad
- ✓ AI Launchpad architecture and capabilities
- ✓ Connecting SAP AI Core
- ✓ Resource groups and service connections
- ✓ Managing AI scenarios
- ✓ Working with configurations
- ✓ Monitoring executions
- ✓ Managing deployments
- ✓ Viewing deployment status and endpoints
- ✓ Operational management of AI workloads
- ✓ AI lifecycle visibility through AI Launchpad

Module 5: Generative AI Hub

- ✓ Introduction to Generative AI Hub
- ✓ Role of Generative AI Hub within AI Foundation
- ✓ Generative AI Hub architecture
- ✓ Accessing generative AI capabilities
- ✓ Model access and orchestration concepts
- ✓ Generative AI Hub integration with SAP AI Core
- ✓ Model consumption workflow
- ✓ Generative AI Hub SDK concepts
- ✓ Generative AI Hub APIs
- ✓ Enterprise generative AI scenarios
- ✓ Working with generative AI services from applications

Module 6: Foundation Models and Model Access

- ✓ Understanding foundation models and Large Language Models (LLMs)
- ✓ Foundation model capabilities
- ✓ Model selection considerations
- ✓ Model availability through Generative AI Hub
- ✓ Comparing models for enterprise scenarios
- ✓ Model parameters and inference settings
- ✓ Temperature, tokens, and other generation controls
- ✓ Context windows and token management
- ✓ Model endpoints
- ✓ Model invocation
- ✓ Structured and unstructured outputs

- ✓ Selecting models based on business requirements
- ✓ Cost, performance, quality, and latency considerations

Module 7: Prompt Engineering and Prompt Management

- ✓ Fundamentals of prompt engineering
- ✓ Anatomy of an effective prompt
- ✓ System, user, and contextual instructions
- ✓ Zero-shot prompting
- ✓ Few-shot prompting
- ✓ Role-based prompting
- ✓ Contextual prompting
- ✓ Prompt templates
- ✓ Structured output generation
- ✓ Controlling model responses
- ✓ Prompt iteration and optimization
- ✓ Handling hallucinations
- ✓ Prompt testing and evaluation
- ✓ Prompt management concepts
- ✓ Reusable prompts for enterprise applications
- ✓ Prompt security considerations

Module 8: Generative AI Hub APIs and SDK Integration

- ✓ Understanding Generative AI Hub programmatic access
- ✓ Authentication and authorization concepts
- ✓ Working with service credentials

- ✓ API-based model interaction
- ✓ SDK-based model consumption
- ✓ Sending prompts programmatically
- ✓ Passing model parameters
- ✓ Processing model responses
- ✓ Handling structured responses
- ✓ Error handling and exception management
- ✓ Integrating AI calls into application logic
- ✓ API testing and debugging
- ✓ Designing reusable AI service components

Module 9: Grounding, Embeddings, Vector Search, and RAG

- ✓ Limitations of standalone LLMs
- ✓ Introduction to grounding
- ✓ Understanding embeddings
- ✓ Converting enterprise information into vector representations
- ✓ Vector storage concepts
- ✓ Similarity and semantic search
- ✓ Chunking strategies
- ✓ Document preprocessing
- ✓ Retrieval techniques
- ✓ Introduction to Retrieval-Augmented Generation (RAG)
- ✓ RAG architecture
- ✓ Retrieval and generation workflow
- ✓ Adding business context to prompts
- ✓ SAP HANA Cloud vector capabilities – conceptual overview

- ✓ Enterprise knowledge grounding
- ✓ Improving response relevance
- ✓ Reducing hallucination risks
- ✓ Designing an enterprise RAG scenario

Module 10: Building Generative AI Applications on SAP BTP

- ✓ Generative AI application architecture
- ✓ Designing AI-enabled SAP BTP applications
- ✓ Connecting applications with Generative AI Hub
- ✓ Integrating enterprise data with LLM workflows
- ✓ Prompt-to-application workflow
- ✓ Implementing conversational scenarios
- ✓ Document summarization scenarios
- ✓ Information extraction
- ✓ Classification and content generation
- ✓ Business process assistance
- ✓ Combining RAG with application logic
- ✓ Handling AI responses within applications
- ✓ Application error handling
- ✓ Designing scalable generative AI solutions
- ✓ Integration considerations for SAP landscapes

Module 11: Security, Responsible AI, Governance, and Operations

- ✓ Enterprise AI security principles
- ✓ Authentication and authorization
- ✓ Role-based access concepts
- ✓ Data privacy considerations
- ✓ Sensitive business information and LLMs
- ✓ Secure prompt and response handling
- ✓ AI governance principles
- ✓ Responsible AI concepts
- ✓ Transparency and explainability considerations
- ✓ Bias and fairness considerations
- ✓ Human oversight
- ✓ Model risk considerations
- ✓ Monitoring AI workloads
- ✓ Logging and troubleshooting
- ✓ Performance considerations
- ✓ Token and consumption management
- ✓ Operational considerations for production AI solutions

Module 12: Enterprise Use Cases and Capstone Implementation

- ✓ Identifying suitable generative AI use cases
- ✓ Evaluating business value and technical feasibility
- ✓ Enterprise knowledge assistant scenario

- ✓ Document question-answering scenario
- ✓ Business content summarization
- ✓ Information extraction from enterprise documents
- ✓ Intelligent business-process assistance
- ✓ SAP data-grounded generative AI scenarios
- ✓ Designing the end-to-end solution architecture
- ✓ Selecting an appropriate foundation model
- ✓ Creating and refining prompts
- ✓ Incorporating enterprise context
- ✓ Implementing a RAG workflow
- ✓ Connecting the solution with Generative AI Hub
- ✓ Testing generated responses
- ✓ Evaluating response quality
- ✓ Security and governance review
- ✓ Performance and optimization considerations
- ✓ Capstone solution walkthrough
- ✓ Production-readiness considerations